

**PERCEIVED LEADERSHIP STYLES OF PRINCIPALS
AND BURNOUT AMONG SECONDARY SCHOOL
TEACHERS OF ASSAM: ROLE OF WORKPLACE
BULLYING AND PSYCHOLOGICAL EMPOWERMENT**

Thesis Submitted for the Award of the Degree of

DOCTOR OF PHILOSOPHY

in

Education

By

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2025

DECLARATION

I, hereby declared that the presented work in the thesis entitled "*Perceived Leadership Styles of Principals and Burnout among Secondary School Teachers of Assam: Role of Workplace Bullying and Psychological Empowerment*" in fulfilment of degree of **Doctor of Philosophy (Ph. D.)** is outcome of research work carried out by me under the supervision of Dr. Anshu Narad, working as Professor, in the **Department of Education** of Lovely Professional University, Punjab, India. In keeping with general practice of reporting scientific observations, due acknowledgements have been made whenever work described here has been based on findings of other investigator. This work has not been submitted in part or full to any other University or Institute for the award of any degree.

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CERTIFICATE

This is to certify that the work reported in the Ph. D. thesis entitled "*Perceived Leadership Styles of Principals and Burnout among Secondary School Teachers of Assam: Role of Workplace Bullying and Psychological Empowerment*" submitted in fulfillment of the requirement for the award of degree of **Doctor of Philosophy (Ph.D.)** in the **Department of Education**, is a research work carried out by **Sumanta Bhattacharya, (Registration No. 42000050)**, is bonafide record of his/her original work carried out under my supervision and that no part of thesis has been submitted for any other degree, diploma or equivalent course.



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ABSTRACT

The study investigated the “perceived leadership styles of principals and burnout among secondary school teachers in relation to workplace bullying and psychological empowerment” among secondary school teachers in Assam. The study was undertaken in the context of increasing demands on teachers and the critical role of school leadership styles in influencing teacher well-being. In this study, ‘perceived leadership style’ refers to the perceived behavioural tendencies of school principals as measured by “Teachers’ Perception of Their School Principal Leadership Style Questionnaire” (Even & Ben David-Hadar, 2021), encompassing “transformational”, “transactional”, and “laissez-faire” leadership styles. ‘Burnout’ was assessed using ‘Copenhagen Burnout Inventory’ (Kristensen et al., 2005), capturing “personal, work-related, and student-related burnout”. “Workplace bullying” was measured with ‘Negative Acts Questionnaire-Revised’ (Einarsen et al., 2009), and “psychological empowerment, defined as a motivational construct comprising meaning, competence, self-determination, and impact, was assessed using Psychological Empowerment Scale” (Spreitzer, 1995). The study adopted a descriptive survey method. The sample comprised 450 secondary school teachers selected through stratified random sampling from government and private schools affiliated to/recognised by the ‘Board of Secondary Education, Assam’, situated in both urban and rural areas. Following were the objectives of the study: (a) to explore the leadership styles of principals as perceived by secondary school teachers; (b) to explore the levels of burnout and psychological empowerment among secondary school teachers; (c) to find out the frequency and forms of workplace bullying among secondary school teachers; (d) to compare the perceived leadership styles of principals, level of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment among teachers with respect to gender, type of school, experience and locality; (e) to find out the relationship of perceived leadership styles of principals (transformational, transactional and laissez-faire) with burnout, workplace bullying and psychological empowerment among secondary school teachers; (f) to find out the relationship of psychological empowerment with workplace bullying among secondary school teachers; (g) to find out the relationship between workplace bullying and burnout among secondary school teachers; (h) to investigate the mediating role of workplace bullying on the relationship

between perceived leadership styles of principals (“transformational”, “transactional” and “laissez-faire”) and burnout; (i) to investigate whether psychological empowerment would moderate the direct and indirect relationship between perceived leadership styles (“transformational”, “transactional” and “laissez-faire”) and burnout via workplace bullying. Data analysis involved the use of descriptive statistics, t-test, ANOVA, Chi-square test of independence correlation ‘r’ and PROCESS macro for testing mediation and moderation models to draw inferences and conclusions from data. Conclusions drawn were (a) A majority of teachers perceived their principals as exhibiting transformational leadership style, followed by transactional leadership style, and only a few perceived laissez-faire leadership style. (b) Female teachers perceived higher transformational leadership style than male teachers; government-school teachers reported higher transformational leadership style than private-school teachers; teachers with less than 5 years of experience perceived higher transformational leadership style, whereas teachers with 5–10 years and 10 years and above of experience perceived higher transactional and laissez-faire leadership styles; rural teachers perceived higher transformational leadership style than urban teachers. (c) Most teachers experienced low-to-moderate levels of overall burnout, with work-related burnout being relatively more prevalent than personal and student-related burnout. (d) At the high level of burnout, female teachers reported greater burnout than males, whereas at the low level, male teachers reported higher burnout than females; government-school teachers reported greater burnout at the high level, whereas private-school teachers reported greater burnout at the low level;; teachers with less than 5 years of experience exhibited significantly higher burnout than those with 5–10 years at the low burnout level, while the 10 years and above group showed similar burnout levels to other groups; urban teachers reported higher burnout than rural teachers at both high and low levels. (e) A majority of teachers experienced workplace bullying at low to occasional levels (“only rarely” or “now and then”), with severe bullying being rare across personal, work-related, and physically intimidating forms. (f) female teachers reported higher workplace bullying than male teachers across all forms, while males were more represented in the “only rarely” category; private-school teachers reported greater bullying than government-school teachers, both in frequency (“only rarely” and “now and then”) and across all forms of bullying;

although teaching experience showed no significant association with frequency, teachers with less than 5 years and those with 10 years and above reported higher bullying in person-related and work-related forms compared to those with 5–10 years of experience; teachers in urban schools experienced higher levels of bullying in ‘person-related,’ ‘work-related,’ and ‘physically intimidating’ forms compared to their rural counterparts, though no significant association with frequency was observed. (g) A majority of teachers reported low psychological empowerment, particularly in meaning, impact, and self-determination, with competence showing relatively higher levels. (h) Female teachers reported higher psychological empowerment than male teachers at the low level; government-school teachers reported higher psychological empowerment than private-school teachers at the low level, while no significant difference was found between them at the high level; teachers with less than 5 years, 5–10 years, and 10 years and above of experience did not differ significantly in psychological empowerment; and no significant difference was found between rural and urban teachers. (i) Perceived transformational leadership style was negatively associated with burnout and workplace bullying and positively associated with psychological empowerment. (j) Perceived transactional and laissez-faire leadership styles were positively associated with burnout and workplace bullying and negatively associated with psychological empowerment. (k) Psychological empowerment was negatively associated with all forms of workplace bullying. (l) Burnout was positively associated with all forms of workplace bullying. (m) Workplace bullying partially mediated the relationship between transformational, transactional, and laissez-faire leadership styles and burnout, indicating both direct and indirect influences of leadership on burnout. (n) Psychological empowerment did not moderate the direct or indirect relationship between transformational leadership style and burnout. (o) Psychological empowerment significantly moderated both the direct and indirect relationships of transactional and laissez-faire leadership styles with burnout. The indirect effect of these leadership styles on burnout through workplace bullying was significant at low and mean levels of psychological empowerment but became non-significant at high levels, indicating that higher psychological empowerment buffered teachers from the adverse effects of passive or control-oriented leadership.

Keywords: “*perceived leadership styles,*” “*workplace bullying,*” “*teacher burnout,*”
“*psychological empowerment*”

TABLE OF CONTENTS

DESCRIPTION		Page No.
Declaration		i
Certificate		ii
Acknowledgement		iii
Abstract		iv-vii
Table of Contents		viii-xiii
List of Tables		xiv-xviii
List of Figures		xix-xxi
Abbreviations		xii
CH- NO.	DESCRIPTION	Page Number
Ch – I	INTRODUCTION	1-54
1.1	Perceived Leadership Styles	5-7
1.1.1	Leadership Theory	7-10
1.1.2	Transformational Leadership	10-11
1.1.3	Transactional Leadership	11-12
1.1.4	Laissez-faire leadership	12-15
1.2	Burnout	15-20
1.2.1	Teacher Burnout	20-22
1.3	Theoretical Framework	22-25
1.4	Workplace Bullying	26-29
1.4.1	Workplace Bullying in Schools	29-32
1.5	Psychological Empowerment	32-35
1.5.1	Teachers' Psychological Empowerment	35-38
1.6	Conceptual Framework of the Study	38-39
1.7	Significance of the Study	40-49
1.8	Statement of the Problem	49
1.9	Operational definitions	49-51
1.10	Objectives	52
1.11	Hypotheses	52-53
1.12	Delimitations	54
Ch-II	REVIEW OF LITERATURE	55-82
2.1	Studies Related to Perceived Leadership Styles and Burnout	56-64
2.2	Studies Related to Perceived Leadership Styles and Workplace Bullying	64-70
2.3	Studies Related to Workplace Bullying and Burnout	70-74
2.4	Studies Related to Perceived Leadership Style,	74-76

	Workplace Bullying and Burnout	
2.5	Studies related to Perceived Leadership Styles and Psychological Empowerment of Teachers	76-79
2.6	Studies related to Psychological Empowerment of Teachers and Workplace Bullying	79-80
2.7	Studies related to Perceived Leadership Style, Psychological Empowerment of Teachers, and Workplace Bullying	80-82
Ch-III	METHODOLOGY	83-135
3.1	Research Method	84
3.2	Research Design	84-85
3.3	Population	85-86
3.4	Sample	86-90
3.4.1	Sample Size	90-95
3.5	Tools used	95-96
3.5.1	Description of Teachers' perception of their school principal leadership style questionnaire	96-97
3.5.2	Reliability and Validity	97
3.5.3	Administration and scoring	97
3.5.4	Validation of Teachers' perception of their school principal leadership style questionnaire in Indian Context	97-98
3.5.5	Exploratory Factor Analysis of Teachers' perception of their school principal leadership style questionnaire	98-103
3.5.6	Results of Confirmatory Factor Analysis	103-106
3.6	Description of Copenhagen Burnout Inventory	107-108
3.6.1	Reliability and Validity	108
3.6.2	Administration and scoring	108-109
3.6.3	Validation of the Copenhagen Burnout Inventory in Indian context	109
3.6.4	Exploratory Factor Analysis of Copenhagen Burnout Inventory	109-111
3.6.5	Results of Confirmatory Factor Analysis	112-114
3.6.6	Norms of interpreting the levels of CBI	114-115
3.7	Description of Negative Acts Questionnaire-Revised (NAQ-R)	115-116
3.7.1	Reliability and Validity	116
3.7.2	Administration and scoring	116-117
3.7.3	Validation of NAQ in Indian Context	117
3.7.4	Exploratory Factor Analysis of NAQ-R	118-121
3.7.5	Results of Confirmatory Factor Analysis	121-123

3.7.6	Norms of interpreting the levels of NAQ-R	124-125
3.8	Description of Psychological Empowerment Scale	125-126
3.8.1	Reliability and Validity	126
3.8.2	Administration and scoring	126
3.8.3	Validation of PES in Indian Context	127
3.8.4	Exploratory Factor Analysis of PES	127-129
3.8.5	Results of Confirmatory Factor Analysis	130-133
3.8.6	Norms of interpreting the levels of PES	133-134
3.9	Procedure of Data Collection	134-135
3.9.1	Statistical Techniques	135-136
Ch-IV	ANALYSIS AND INTERPRETATION	137-263
4.1	Data Cleaning	137-138
4.2	Descriptive Analysis	138-139
4.2.1	Descriptive analysis of Leadership Styles of Principals as perceived by teachers	139-141
4.2.2	Descriptive analysis of burnout among secondary school teachers	142-143
4.2.3	Descriptive analysis of workplace bullying among secondary school teachers	143-145
4.2.4	Descriptive analysis of psychological empowerment among secondary school teachers	145-146
4.3.1	Percentage-wise analysis of the leadership styles of principals as perceived by secondary school teachers	147-148
4.4	Percentage-wise analysis of levels of burnout and psychological empowerment	148-153
4.4.1	Percentage-wise analysis of levels of burnout of secondary school teachers	148-150
4.4.2	Percentage-wise analysis of levels of psychological empowerment of secondary school teachers	151-153
4.5	Percentage-wise analysis of frequency and forms of workplace bullying among secondary school teachers	153
4.5.1	Frequency of workplace bullying	153-155
4.5.2	Percentage-wise analysis of forms of workplace bullying among teachers	155-157
4.6	Comparative Analysis	157
4.6.1	Results relating to differences in perceived leadership styles of principals with respect to gender	157-160
4.6.2	Results relating to differences in perceived leadership styles of principals with respect to locality	160-162
4.6.3	Results relating to differences in perceived leadership	163-171

	styles of principals with respect to teaching experience	
4.6.4	Results relating to differences in perceived leadership styles of principals with respect to type of school	171-174
4.7.1	Results relating to difference of levels of burnout of teachers with respect to gender	174-176
4.7.2	Results relating to differences in levels of burnout of teachers with respect to locality	176-178
4.7.3	Results relating to differences in levels of burnout of teachers with respect to teaching experience	178-185
4.7.4	Results relating to differences in levels of burnout of teachers with respect to type of school	185-187
4.8.1	Results relating to differences in frequency of workplace bullying of teachers with respect to gender	187-189
4.8.2	Results relating to differences in forms of workplace bullying of teachers with respect to gender	189-191
4.8.3	Results relating to differences in frequency of workplace bullying of teachers with respect to locality	191-192
4.8.4	Results relating to differences in forms of workplace bullying of teachers with respect to locality	193-195
4.8.5	Results relating to differences in frequency of workplace bullying of teachers with respect to teaching experience	195-197
4.8.6	Results relating to differences in forms of workplace bullying of teachers with respect to teaching experience	197-202
4.8.7	Results relating to differences in frequency of workplace bullying of teachers with respect to type of school	202-204
4.8.8	Results relating to differences in forms of workplace bullying of teachers with respect to type of school	204-206
4.9.1	Results relating to differences in levels of psychological empowerment of teachers with respect to gender	207-209
4.9.2	Results relating to differences in levels of psychological empowerment of teachers with respect to locality	209-211
4.9.3	Results relating to differences in levels of psychological empowerment with respect to teaching experience	211-217
4.9.4	Results relating to differences in levels of psychological empowerment of teachers with respect to type of school	217-219
4.10	Correlational Analysis	219
4.10.1	Correlation of perceived leadership styles of principals with burnout among secondary school teachers	219-222
4.10.2	Correlation of perceived leadership styles of principals with workplace bullying among secondary school	222-225

	teachers	
4.10.3	Correlation of perceived leadership styles of principals with psychological empowerment among secondary school teachers	225-227
4.10.4	Correlation of psychological empowerment with workplace bullying among secondary school teachers	227-231
4.10.5	Correlation of workplace bullying with burnout among secondary school teachers	231-233
4.11	Mediation Analysis	233-234
4.11.1	Mediating role of workplace bullying in the relationship between perceived leadership styles of principals (transformational, transactional, and laissez-faire) and burnout.	234
4.11.1.1	Results relating to mediating role of workplace bullying in the relationship between transformational leadership style of principals and burnout of secondary school teachers	235-237
4.11.1.2	Results relating to mediating role of workplace bullying in the relationship between transactional leadership style of principals and burnout of secondary school teachers	237-240
4.11.1.3	Results relating to mediating role of workplace bullying in the relationship between laissez-faire leadership style of principals and burnout of secondary school teachers	240-242
4.12	Moderation Analysis	243
4.12.1	Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transformational) of principals and burnout among secondary school teachers	243-246
4.12.2	Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transactional) of principals and burnout among secondary school teachers	246-250
4.12.3	Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (Laissez-faire) of principals and burnout among secondary school teachers	250-253
4.12.4	Results relating to psychological empowerment would not moderate the indirect relationship between perceived leadership styles (transformational, transactional, laissez-fair) and burnout	253-254

4.12.4.1	Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (transformational) of principals and burnout among secondary school teachers.	255-258
4.12.4.2	Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (transactional) of principals and burnout among secondary school teachers.	258-261
4.12.4.3	Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (laissez-faire) of principals and burnout among secondary school teachers.	261-263
Chapter-V	SUMMARY CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FUTURE RESEARCH	264-311
5.1	Summary	264-274
5.2	Conclusions	275-286
5.3	Implications and Recommendations	286-308
5.4	Limitations and suggestions for future research	308-311
	Bibliography	312-354
	Appendices	355-361

LIST OF TABLES

S. No.	DESCRIPTION	PAGE NO.
1.1	Operational definitions of Variables as per Gonsalves (2021)	51
3.1	Distribution of the districts in the Brahmaputra valley of Assam	86
3.2	Number of schools covered in sample	89
3.3	Selection of teachers from educational blocks Tengakhat and Hapjan	91
3.4	Number of teachers from Educational Blocks Tengakhat and Hapjan	91
3.5	Final sample of teachers from each block of two districts	91
3.6	Detailed plan of sample	93
3.7	Dimension wise items of Teachers' Perception of Their School Principal Leadership Style Questionnaire	97
3.8	Reliability information of Teachers' Perception of Their School Principal Leadership Style Questionnaire	99
3.9	Reliability information of Teachers' Perception of Their School Principal Leadership Style Questionnaire	100
3.10	KMO and Bartlett's Test of Sphericity of Teachers' Perception of Their School Principal Leadership Style Questionnaire	101
3.11	Total variance explained of Teachers' Perception of Their School Principal Leadership Style Questionnaire	102
3.12	Results of exploratory factor analysis of Teachers' Perception of Their School Principal Leadership Style Questionnaire	103
3.13	Measure of fitness indices for Teachers' Perception of Their School Principal Leadership Style Questionnaire	104
3.14	CR, AVE, MSV, MaxR(H) of each dimension and Square Root of the Average Variance Extracted and Correlations Matrix	105
3.15	Final Distribution of items of the Teachers' Perception of Their School Principal Leadership Style Questionnaire	106
3.16	Dimensions of Copenhagen Burnout Inventory	108
3.17	KMO and Bartlett's Test of Sphericity of Copenhagen Burnout Inventory	110
3.18	Total variance explained of Copenhagen Burnout Inventory	110
3.19	Results of exploratory factor analysis for Copenhagen Burnout Inventory	111

3.20	Measure of fitness indices for Copenhagen Burnout Inventory	112
3.21	CR, AVE, MSV, MaxR(H) of each dimension of CBI and Square Root of the Average Variance Extracted and Correlations Matrix	113
3.22	Norms for interpretation of raw scores of burnout	114
3.23	Mean and standard deviation of Burnout and its dimensions	115
3.24	Scoring pattern of NAQ-R	117
3.25	Distribution of items of NAQ-R	117
3.26	Reliability information of NAQ-R	119
3.27	Factor loadings of NAQ-R	120
3.28	Total variance explained of NAQ-R	121
3.29	Measure of fitness indices for NAQ-R	122
3.30	CR, AVE, MSV, MaxR (H) of each dimension of NAQ-R and Square Root of the Average Variance Extracted and Correlations Matrix	122
3.31	Norms for interpretation of raw scores of NAQ-R	124
3.32	Mean and standard deviation of workplace bullying and its dimensions	125
3.33	Scoring pattern of PES	126
3.34	Distribution of items of PES	126
3.35	Reliability of PES	128
3.36	Descriptive information of PES and factor loadings	129
3.37	Total Variance Explained of the PES	130
3.38	Measure of fitness indices for PES	130
3.39	CR, AVE, MSV, MaxR(H) of each dimension of <i>PES</i> and Square Root of the Average Variance Extracted (AVE) and Correlations Matrix	131
3.40	Norms for interpretation of raw scores of PES	133
3.41	Mean and standard deviation of psychological empowerment scale and its dimensions	134
4.2.1	Descriptive statistics of Leadership Styles of Principals as perceived by teachers	139
4.2.2	Descriptive statistics of burnout among secondary school teachers	142
4.2.3	Descriptive statistics of workplace bullying among secondary school teachers	143
4.2.4	Descriptive statistics of psychological empowerment among secondary school teachers	145
4.3.1	Percentage-wise analysis of leadership styles of principals as perceived by teachers	147

4.4.1	Percentage-wise analysis of burnout of teachers	149
4.4.2	Percentage-wise analysis of levels of psychological empowerment of secondary school teachers	151
4.5.1	Frequency of workplace bullying among teachers	154
4.5.2	Percentage-wise analysis of forms of workplace bullying among teachers	155
4.6.1	Mean scores of perceived leadership styles of principals with respect to gender	158
4.6.2	Mean scores of perceived leadership styles with respect to locality	160
4.6.3.1	Test of homogeneity of variances for perceived leadership styles of principals	163
4.6.3.2	Robust Tests of equality of means for Transformational Leadership	164
4.6.3.3	Multiple comparisons for dimension of Transformational Leadership style	164
4.5.3.4	Descriptive statistics for transformational leadership with respect to teaching experience	164
4.5.3.5	Summary of ANOVA for transactional leadership, and laissez-faire leadership styles	166
4.6.3.6	Descriptive statistics for various dimensions of perceived leadership styles of principals	167
4.6.4	Mean scores of perceived leadership styles with respect to type of school	172
4.7.1	Mean scores of levels of burnout of teachers with respect to gender	174
4.7.2	Mean scores of levels of burnout with respect to locality	176
4.7.3.1	Test of homogeneity of variances for teachers at high burnout level with respect to years of experience	179
4.7.3.2	Summary of ANOVA for teachers at high burnout level with respect to teaching experience	179
4.7.3.3	Descriptive statistics for teachers at high burnout level with respect to teaching experience	179
4.7.3.4	Test of homogeneity of variances for low burnout level of teachers with respect to years of experience	181
4.7.3.5	Robust Tests of equality of means for low burnout level of teachers with respect to years of experience	181
4.7.3.6	Multiple comparisons for teachers at low burnout level with respect to years of experience	181
4.7.3.7	Descriptive statistics for teachers at low burnout level with	182

	respect to years of experience	
4.7.4	Mean scores of levels of burnout of teachers with respect to type of school	185
4.8.1	Chi-Square Test for Independence between frequency of workplace bullying and gender	187
4.8.2	Mean scores of forms of workplace bullying of teachers with respect to gender	189
4.8.3	Chi-Square Test for Independence between frequency of workplace bullying and locality	191
4.8.4	Mean scores of forms of workplace bullying of teachers with respect to locality	193
4.8.5	Chi-Square Test for Independence between frequency of workplace bullying and teaching experience	195
4.8.6.1	Test of homogeneity of variances for different forms of workplace bullying of teachers	197
4.8.6.2	Robust Tests of equality for Physically intimidating bullying	198
4.8.6.3	Summary of ANOVA for person-related bullying, work-related bullying forms of workplace bullying	198
4.8.6.4	Descriptive statistics for various dimensions of workplace bullying	199
4.8.7	Chi-Square Test for Independence between frequency of workplace bullying and type of school	202
4.8.8	Mean scores of forms of workplace bullying of teachers with respect to type of school	204
4.9.1	Mean scores of levels of psychological empowerment of teachers with respect to gender	207
4.9.2	Mean scores of psychological empowerment levels of teachers with respect to locality	209
4.9.3.1	Test of homogeneity of variances for teachers at high psychological empowerment level with respect to teaching experience	212
4.9.3.2	Summary of ANOVA for teachers at high psychological empowerment level with respect to teaching experience	212
4.9.3.3	Descriptive statistics for teachers at high psychological empowerment level with respect to teaching experience	213
4.9.3.4	Test of homogeneity of variances for teachers at low psychological empowerment level with respect to teaching experience	214
4.9.3.5	Summary of ANOVA for teachers at low psychological empowerment level with respect to teaching experience	214

4.9.3.6	Descriptive statistics for teachers at low psychological empowerment level with respect to teaching experience	215
4.9.4	Mean scores of levels of psychological empowerment of teachers with respect to type of school	217
4.10.1	Summary of correlation of perceived leadership styles of principals and burnout of teachers	220
4.10.2	Summary of correlation in perceived leadership styles of principals and workplace bullying of teachers	222
4.10.3	Summary of correlation in perceived leadership styles of principals and psychological empowerment of teachers	225
4.10.4	Summary of correlation in psychological empowerment and workplace bullying of teachers	228
4.10.5	Correlation of workplace bullying with burnout among secondary school teachers	231
4.11.1	Mediation analysis of workplace bullying on the relationship between transformational leadership style and burnout of secondary school teachers	235
4.11.2	Mediation analysis of workplace bullying on the relationship between transactional leadership style and burnout of secondary school teachers	237-238
4.11.3	Mediation analysis of workplace bullying on the relationship between laissez-faire leadership style and burnout of secondary school teachers	240
4.12.1	Model summary of moderation analysis	243
4.12.2	Moderation analysis of perceived transformational leadership style, psychological empowerment, and their interaction on burnout	244
4.12.3	Model summary of moderation analysis	246
4.12.4	Moderation analysis of perceived transactional leadership style, psychological empowerment, and their interaction on burnout	247
4.12.5	Model summary of moderation analysis	250
4.12.6	Moderation analysis of perceived laissez-faire leadership style, psychological empowerment, and their interaction on burnout	251
4.12.7	Moderated mediation model of perceived transformational leadership style of principals	255
4.12.8	Moderated mediation model of perceived transactional leadership style of principals	258
4.12.9	Moderated mediation model of perceived laissez-faire leadership style of principals	261

LIST OF FIGURES

FIGURE No	DESCRIPTION	PAGE- NO
1.1	Job Demands–Resources (JDR) theory, adapted from Bakker and Demerouti (2017)	25
1.2	Mediating Role of Workplace Bullying in Perceived Leadership Styles and Burnout Among Teachers	39
1.3	Moderated Mediation Model Incorporating Psychological Empowerment (Adapted from Hayes, 2018)	39
3.1	Research design	85
3.2	Sampling process	87
3.3	Pictorial representation of the sample	94
3.4	Factor structure of leadership styles scale with standardised loadings	106
3.5	Factor structure of CBI with standardised loadings	113
3.6	3-factor structure of NAQ-R with standardised loadings	123
3.7	Factor structure of PES	132
4.2.1.	Normal Probability plot (Q-Q Plot) of Transformational Leadership style	140
4.2.2	Normal Probability plot (Q-Q Plot) of Transactional Leadership style	141
4.2.3	Normal Probability plot (Q-Q Plot) of Laissez-faire Leadership style	141
4.2.4	Normal Probability plot (Q-Q Plot) of Burnout	143
4.2.5	Normal probability plot (Q-Q Plot) of workplace bullying among secondary school teachers	145
4.2.6	Normal Probability plot (Q-Q Plot) of Psychological Empowerment	146
4.3.1	Distribution of perception of teachers towards leadership styles of principals	148
4.4.1	Levels of personal burnout of teachers	149
4.4.2	Levels of work-related burnout of teachers	149
4.4.3	Levels of student-related burnout of teachers	150
4.4.4	Levels of burnout of teachers(overall)	150
4.4.5	Levels of meaning among teachers	152
4.4.6	Levels of impact among teachers	152
4.4.7	Levels of competence among teachers	152

4.4.8	Levels of self-determination among teachers	152
4.4.9	Levels of psychological empowerment among teachers	152
4.5.1	Frequency of workplace bullying	154
4.5.2	Levels of person-related bullying of teachers	156
4.5.3	Levels of work-related bullying of teachers	156
4.5.4	Levels of physically intimidating bullying of teachers	156
4.5.5	Levels of workplace bullying (overall)	156
4.6.1	Mean scores of perceived leadership styles of principals with respect to gender	158
4.6.2	Mean scores of perceived leadership styles of principals with respect to locality	161
4.6.3	Mean scores of perceived leadership styles of principals with respect to teaching experience	169
4.6.4	Mean scores of perceived leadership styles of principals with respect to type of school	172
4.7.1	Mean scores of levels of burnout of teachers with respect to gender	175
4.7.2	Mean scores of levels of burnout of teachers with respect to locality	177
4.7.3.1	Mean scores of teachers at high burnout level with respect to teaching experience	180
4.7.3.2	Mean scores of teachers at low burnout level with respect to teaching experience	183
4.7.4	Mean scores of levels of burnout of teachers with respect to type of school	185
4.8.1	Frequency of workplace bullying with respect to gender	188
4.8.2	Mean scores of forms of workplace bullying of teachers with respect to gender	189
4.8.3	Frequency of workplace bullying with respect to locality	191
4.8.4	Mean scores of forms of workplace bullying of teachers with respect to locality	193
4.8.5	Frequency of workplace bullying with respect to teaching experience	195
4.8.6	Mean scores of forms of workplace bullying of teachers with respect to teaching experience	200
4.8.7	Frequency of workplace bullying with respect to type of school	203

4.8.8	Mean scores of forms of workplace bullying of teachers with respect to type of school	204
4.9.1	Mean score of levels of psychological empowerment with respect to gender	207
4.9.2	Mean score of levels of psychological empowerment with respect to locality	210
4.9.3.1	Mean scores of teachers at high psychological empowerment level with respect to teaching experience	213
4.9.3.2	Mean scores of teachers at low psychological empowerment level with respect to teaching experience	215
4.9.4	Mean scores of levels of psychological empowerment of teachers with respect to type of school	217
4.11.1	Workplace bullying in the relationship between transformational leadership style and burnout	235
4.11.2	Workplace bullying in the relationship between transactional leadership style and burnout	238
4.11.3	Workplace bullying in the relationship between laissez-faire leadership style and burnout	241
4.12.1	Psychological empowerment buffering the effect of perceived transformational leadership style on burnout	245
4.12.2.	Psychological empowerment buffering the effect of perceived transactional leadership style on burnout	249
4.12.3	Psychological empowerment buffering the effect of perceived laissez-faire leadership style on burnout	252
4.12.	Hypothesised moderated mediation model	254

ABBREVIATIONS	
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
TLI	Tucker Lewis Index
RMR	Root Mean Square Residual
SRMR	Standardized Root Mean Square Residual
RMSEA	Root Mean Square Error of Approximation
GFI	Goodness of fit index
AGFI	Adjusted Goodness of fit index
CFI	Comparative Fit Index
SEBA	Board of Secondary Education, ASSAM
CBI	Copenhagen Burnout Inventory
NAQ-R	Negative Acts Questionnaire-Revised
PES	Psychological Empowerment Scale
MaxR(H)	The maximum reliability
Df	Degree of Freedom
Sk	Skewness
Ku	Kurtosis
AVE	Average Variance Extracted
CR	Composite reliability
M	Mean
SD	Standard deviation
Sign.	Significant
DV	Dependent Variable
IV	Independent Variable
ASV	Average Shared Variance
MSV	Maximum Shared Variance
KMO	Kaiser-Meyer-Olkin test

CHAPTER-I INTRODUCTION

“ॐ सह नावतु ।
सह नौ भुनक्तु ।
सह वीर्यं करवावहै ।
तेजस्वि नावधीतमस्तु मा विद्विषावहै ।
ॐ शान्तिः शान्तिः शान्तिः ॥”

(Shanti Mantra – Taittiriya Upanishad, Shikshavalli, 2.2.2)

Translation:

“Om, together may we two Move (in our Studies, the Teacher, and the student),
Together may we two Relish (our Studies, the Teacher, and the student),
Together may we perform (our Studies) with Vigour (with deep Concentration),
May what have been studied by us be filled with the Brilliance (of Understanding,
leading to Knowledge);
May it Not give rise to Hostility (due to lack of Understanding),
Om Peace, Peace, Peace.”

“The future of a nation is shaped in its classrooms” encapsulates the fundamental role education plays in societal development. ‘The National Education Policy (NEP, 2020)’ identifies ‘education’ as a transformative force that fosters economic, social, and political progress. It emphasizes that sustainable development goals can only be achieved through high-quality educational institutions and competent individuals. Education fosters societal change without conflict or upheaval, contributing to a more just and equitable world (NEP, 2020). Teachers, as the architects of this transformation, nurture responsible, critical-thinking citizens. Their dedication forms the cornerstone of national prosperity, influencing individual lives and the trajectory of society as a whole.

Teachers are pivotal to achieving inclusive, equitable, and high-quality education, as outlined in Sustainable Development Goal 4 (UNESCO, 2021). By nurturing students’ intellectual, social, and emotional development, teachers enable them to acquire the competencies needed to succeed in a knowledgeable, empathetic,

and capable society. Additionally, teachers play a significant role in economic development by cultivating a workforce capable of innovation and productivity (OECD, 2019). In line with NEP 2020, teachers are essential in shaping 21st-century learners by adopting competency-based and experiential methodologies that align with global standards.

Modern teaching requires addressing diverse student needs, promoting inclusivity, and creating a sense of belonging. Teachers must adapt curricula, implement differentiated teaching strategies, and provide constructive feedback to ensure meaningful and engaging learning experiences. However, the profession has become increasingly demanding due to evolving educational policies, rapid technological advancements, and complex societal needs. Teachers need to continually enhance their knowledge and competencies to adapt to emerging developments in artificial intelligence (AI), digital technologies, and pedagogy. UNESCO (2022) underscores the need for comprehensive teacher training programmes to prepare teachers for these challenges. The OECD (2021) emphasises that teachers must integrate emerging technologies into the classroom while fostering critical digital literacy among students.

Additionally, teachers face systemic issues, including resource constraints, large class sizes, disengaged students, and inflexible administrative policies. NEP 2020 identifies these challenges and recommends reducing teacher workload through technology integration, streamlined administrative tasks, and increased professional development opportunities. According to ‘World Health Organisation (WHO, 2021)’, teacher well-being is a critical component of effective education, as burnout and stress can significantly impact performance and student outcomes.

The push for academic excellence, institutional competition, and top rankings has led to an increased burden on teachers, as schools introduce supplementary programmes beyond traditional classroom teaching. UNESCO (2021) calls for balancing these demands with adequate support systems to sustain teacher motivation and well-being. The OECD (2021) also highlights the need for policies that recognize the diverse and influential roles teachers play in shaping both students and the wider community.

In this context, the well-being of teachers, especially those in secondary schools, has faced unprecedented challenges worldwide (Education International, 2023; Botha, 2024). Mounting evidence reveals a disturbing rise in emotional strain, job dissatisfaction, and professional disengagement among teachers. According to a 2025 report by UNESCO, the global rate of teacher attrition has nearly doubled within seven years, increasing from 4.6% in 2015 to over 9% by 2022, thereby threatening the global goal of achieving universal secondary education by 2030. Depending on geographic and institutional contexts, burnout prevalence among teachers has been found to range between 25% and 70.9%, signalling a growing mental health crisis in the education sector (UNESCO & Teacher Task Force, 2025).

The growing pressures faced by teachers have contributed to elevated stress and burnout. Studies have shown that professions involving direct human services—such as teaching, healthcare, and social work—are particularly associated with increased psychological strain (Johnson et al., 2005; Sprang et al., 2007). Numerous studies have emphasised that school teachers are especially vulnerable to occupational stress, which, if persistent, may lead to chronic physical and psychological health problems. Teachers are among the professional groups most affected by psychological challenges (Schonfeld et al., 2017).

Teachers and middle-level administrators are identified as especially vulnerable to job stress, which often results in burnout (Scott, 1978; Vash, 1980, as cited in Al-Omari et al., 2008). According to Austin and Gamson (1983), this vulnerability arises from limited career advancement opportunities, a perceived lack of control, and insufficient time and resources to manage their numerous responsibilities (as cited in Al-Omari et al., 2008).

Importantly, bullying in educational institutions is no longer seen as limited to student behaviour. Teachers themselves are increasingly reporting experiences of workplace hostility, often originating from peers, school leaders, or systemic organisational cultures (UNESCO, 2021). This positions teaching as one of the professions most vulnerable to such psychological harm. The correlation between workplace bullying and teacher burnout has been well established, with prolonged exposure contributing to emotional fatigue, loss of motivation, and, ultimately, decisions to leave the profession. Bullying, often rooted in unsupportive leadership and

toxic school cultures, contributes significantly to emotional exhaustion, reduced motivation, and eventual withdrawal from the profession. These findings highlight the urgent need to address both burnout and bullying as interconnected issues requiring systemic interventions within educational settings (Zapf et al., 2020; Fernandez-Batanero et al., 2023).

National Education Policy (NEP, 2020) emphasises that teacher well-being is fundamental to the success of educational systems and to the holistic development of students. Teachers' mental and physical well-being play a vital role in determining their capacity to provide high-quality education. According to the World Health Organisation (WHO, 2004), "mental health is a state of well-being where individuals can cope with normal stresses, work productively, and contribute to their community." The WHO further noted that "mental health issues arise from a complex interplay of psychological, biological, social, and environmental factors, and that there is growing evidence that both the content and context of work may contribute to the development of mental health problems in the workplace."

In educational settings, stress and burnout-commonly exacerbated by demanding workloads, limited professional autonomy, and inadequate institutional backing-can hinder teachers' effectiveness and, in turn, negatively impact student achievement. Promoting teacher well-being therefore requires a multifaceted approach that includes fostering professional autonomy, encouraging supportive leadership, and cultivating a positive school climate (Collie et al., 2018).

The physical and mental health of teachers forms a foundational element in supporting student growth and development. However, a persistent mismatch between teachers' perceived capabilities and the growing demands of the profession has become a source of considerable pressure. This imbalance can negatively impact their well-being and diminish their professional effectiveness. Teachers who do not feel confident or supported in their roles are more susceptible to elevated levels of stress. Like professionals in other high-demand fields, teachers are not exempt from occupational stress. Increasingly, they report feeling overwhelmed by the demands of the job, with many identifying symptoms consistent with occupational burnout.

While various individual and environmental factors-such as organisational climate, psychological capital, and motivation-can influence a teacher's physical and

mental well-being, leadership style stands out as a key predictor of burnout due to its substantial impact on the workplace atmosphere and teachers' day-to-day experiences. The influence of leadership on improving organisational performance has been extensively acknowledged, prompting considerable research into various leadership styles, including transformational, transactional, laissez-faire, autocratic, democratic, task-oriented, people-oriented, authentic, and servant leadership approaches. The importance of leadership in influencing employees' performance, commitment, and job satisfaction has been well researched. Several studies have, however, shown evidence of increased employee stress due to certain leadership behaviours, leading to chronic stress or burnout among subordinates.

1.1 Perceived Leadership Styles

Leadership is the practice of inspiring individuals within an organisation to work collaboratively toward achieving shared goals. Burns (1978) introduced leadership as a paradigm encompassing two primary styles: transformational and transactional (as cited in Den Hartog, 2019). Transformational leadership focuses on creating a shared sense of inspiration between leaders and team members, aiming to elevate motivation and ethical standards within the organisation. In contrast, transactional leadership motivates followers through appeals to self-interest. Burns criticised the fragmented nature of leadership studies, which often examined leaders and followers in isolation, despite leadership being a dynamic interaction between the two. He argued that leadership, when conducted with integrity and purpose, can drive positive transformation for both the organisation and its workforce.

Leadership is widely recognised as the capacity to influence and guide individuals toward achieving or surpassing organisational objectives. Kolzow (2014) defined it as the ability to inspire voluntary commitment, while Vroom and Jago (2007) explained it as "a dynamic process rather than a personality trait." Leadership emerges from the interplay of relationships within an organisation and is influenced by the social environment and organisational context (Uhl-Bien, 2006). This multifaceted nature underscores leadership as a dynamic phenomenon shaped by context and relationships.

The ability to influence and align individual efforts with organisational goals is central to leadership. Javidan and House (2001) described it as an art of persuasion, while Nanjundeswaras and Swamy (2014) highlighted the critical role of leaders in achieving organisational success. Leadership styles, defined as consistent behavioural patterns used to inspire and guide others, play a pivotal role in influencing organisational outcomes (Hersey et al., 2001, as cited in Caganaga, 2015).

Leadership, examined extensively across disciplines such as business, politics, and education, remains a critical determinant of organisational outcomes. Daniels et al. (2019) and Leithwood et al. (2020) emphasised leadership styles' role in motivating individuals to exceed performance expectations. Ultimately, leadership quality determines organisational success or failure (Centre for Creative Leadership, 2023; Harvard Business School, 2023). Effective leadership, grounded in ethical practices and commitment, fosters positive organisational change, whereas narcissistic or amoral leadership may result in significant organisational harm. Thus, leadership is best understood as a purposeful and relational process that achieves success through collaboration, guidance, and shared vision.

'Perceived leadership styles' denote how employees or followers interpret their leader's behaviour, attitudes, and actions. It is the subjective assessment of a leader's style based on observable behaviours, communication, decision-making, and interactions. 'Perceived leadership styles' may include 'transformational,' 'transactional,' 'autocratic,' 'democratic,' and 'laissez-faire leadership,' each of which can influence employee motivation, satisfaction, and performance. Accordingly, leaders must remain aware of how their behaviour is perceived by team members.

The leadership style of school principals substantially impacts teachers' well-being. Authoritarian and unsupportive approaches often lead to burnout, as principals who promote top-down decision-making, micromanage, or fail to empower teachers create stressful and demotivating work environments. Such contexts foster feelings of powerlessness, lack of autonomy, and undervaluation among teachers, culminating in emotional exhaustion, depersonalisation, and reduced performance. Furthermore,

principals who neglect open communication fail to provide resources, or disregard teacher feedback may exacerbate these negative outcomes.

Conversely, principals who demonstrate transformational and supportive leadership—marked by collaboration, empathy, and recognition—can mitigate burnout and promote a school environment that upholds teachers’ well-being. Leaders who prioritise staff welfare, encourage autonomy, and maintain open communication channels can alleviate stress, enhance job satisfaction, and cultivate a sense of meaning and accomplishment. Neglecting these practices may heighten emotional fatigue, disengagement, and diminished performance, underscoring how leadership style significantly shapes teachers’ professional well-being.

1.1.1 Leadership Theory

Leadership theory examines several methodologies for comprehending how leaders affect, inspire, and direct individuals or groups in the pursuit of objectives. Leadership theories have undergone substantial evolution, mirroring shifting viewpoints on the ways in which leaders impact and inspire their followers. From initial trait-based models to more dynamic frameworks such as transformational and contingency theories, each paradigm provides distinct insights into the essence and efficacy of leadership in diverse circumstances.

The Trait Theory of Leadership, originating in the early 20th century, asserts that some individuals possess innate characteristics that render them effective leaders. This idea posits that leadership is an inherent capability associated with personality attributes, including intelligence, confidence, charisma, decisiveness, and integrity. Early scholars, such as Thomas Carlyle and Francis Galton, thought that leadership attributes were innate and could not be acquired or enhanced by experience or education. Carlyle's "Great Man Theory" illustrates the notion that history is influenced by exceptional leaders who emerge during crises because of their inherent abilities. Although the trait method received significant attention in the early 1900s, later studies demonstrated that no singular combination of attributes could universally forecast leadership effectiveness across all contexts. This resulted in criticism of the theory for

neglecting the significance of context and the dynamics of leader-follower relationships. Notwithstanding its constraints, the trait theory established the groundwork for contemporary leadership research by emphasising the significance of personal attributes.

In reaction to the constraints of trait theory, behavioural theories evolved between the 1930s and 1950s, redirecting attention from intrinsic traits to the observable behaviours and actions demonstrated by leaders. Researchers sought to discover distinct behaviours that distinguished effective leaders from ineffective ones. Notable research during this period, including studies from 'Ohio State University' and the 'University of Michigan', revealed two principal leadership behaviours: task-oriented behaviours (concentrated on goal-setting, work organisation, and objective attainment) and relationship-oriented behaviours (centred on fostering trust, supporting team members, and sustaining positive interpersonal relations). Researchers at Ohio State (1945) introduced the ideas of Initiating Structure and Consideration, which indicated the degree to which leaders delineated responsibilities and fostered positive relationships with followers, respectively. Behavioural theories, as postulated by Kurt Lewin, Douglas McGregor and others, represented a notable transformation by proposing that leadership may be acquired and cultivated through training, rather than being an immutable collection of attributes. Nonetheless, these theories faced criticism for neglecting situational aspects and the diverse circumstances in which leadership transpired.

During the 1960s and 1970s, contingency leadership theories gained prominence, suggesting that the leadership effectiveness depends on how well a leader's behaviour aligns with the specific demands of a given situation. Unlike earlier personality or behavioural theories, these models rejected the idea of a universally applicable leadership style. Fiedler's Contingency Model (1967) was among the first to assert that a leader's success depends on both their natural leadership orientation-whether task-focused or relationship-oriented-and the situational context, assessed through factors such as leader-member relations, the structure of the task, and the leader's positional power. Expanding on this situational viewpoint, Hersey and Blanchard's Situational Leadership Theory (1977) proposed that leaders should tailor

their leadership style according to the competence and commitment levels of their followers. House's Path-Goal Theory (1971) further emphasised the importance of aligning leadership behaviour with followers' needs and situational demands, suggesting that leaders should clarify goals and tailor their support to help subordinates achieve desired outcomes. These contingency-based frameworks marked a significant shift toward understanding leadership as context-dependent, recognizing that both environmental conditions and follower characteristics influence a leader's effectiveness.

'Full Range Leadership Theory' (FRLT), formulated by Bernard Bass and Bruce Avolio in the 1980s and 1990s, constitutes an all-encompassing framework for comprehending leadership by amalgamating diverse leadership styles into a unified continuum. It substantially diverges from previous leadership theories by integrating components of both transactional and transformational leadership, while also incorporating laissez-faire leadership into its framework. This integration enables FRLT to encompass the broad range of leadership behaviours, from passive to extremely active, while incorporating the intricate dynamics of leader-follower relationships in contemporary organisations.

A principal feature of the 'Full Range Leadership Theory' is its amalgamation of transformational and transactional leadership into a singular, holistic model. Previous leadership theories, like trait and behavioural theories, concentrated on the leader's intrinsic attributes or actions undertaken by leaders, but contingency theories highlighted environmental variables. Nevertheless, these prior methodologies frequently regarded leadership styles as distinct or separate entities. The Full Range Leadership Theory (FRLT) recognises that effective leaders frequently integrate both transactional and transformational elements-using rewards and recognition to promote compliance and performance while also inspiring and motivating followers to achieve beyond standard expectations. FRLT also includes laissez-faire leadership, which represents the most passive and least effective form of leadership within the theoretical framework.

The Full Range Leadership Theory distinguishes itself from previous models by integrating “transformational,” “transactional,” and “laissez-faire leadership” into a holistic framework, underscoring the versatility of leadership styles along a continuum and illuminating the intricate dynamics of the leader-follower relationship. It offers a more refined comprehension of how leaders might adaptively employ diverse styles to tackle distinct organisational issues and requirements.

The Full Range Leadership Theory is arguably one of the most extensively utilised comprehensive leadership theories that includes a spectrum of leader behaviours (Kanste et al., 2007). The Full Range model provides a spectrum of leadership styles applicable to many contexts, with its efficacy substantiated by meta-analyses conducted by Judge et al. (2004). The Full Range paradigm is distinctive in the domain of leadership (Antonakis & House, 2002; Avolio & Bass, 2002, as cited in Rowold, 2005).

The present study involved three main ‘leadership styles’: ‘transformational’, ‘transactional,’ and ‘laissez-faire.’ The use of this comprehensive framework facilitated insight into the ways different leadership styles can either empower or challenge teachers in their professional roles, ultimately affecting school performance and teacher well-being.

1.1.2 Transformational Leadership Style

The FRL paradigm defines ‘transformational leadership style’ as “idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration” (Northouse, 2004) (as cited in Bass & Riggio, 2006). Idealised influence (charisma) makes followers feel connected to the leader. Followers admire, respect, and trust such leaders (Northouse, 2004, as cited in Bass & Riggio, 2006.) Inspirational motivation requires setting high standards and communicating goals in simple ways that offer significance and challenge to work (Northouse, 2004, as cited in Bass & Riggio, 2006). Intellectual stimulation excites and inspires people and teams. Intellectually stimulating leaders examine assumptions, reframe problems, and

reimagine existing situations to encourage creativity and innovation (Northouse, 2004) (as cited in Bass & Riggio, 2006).

Because of their self-determination, self-confidence, and lack of inner turmoil, transformational leaders inspire their subordinates to succeed (Bass & Riggio, 2006). Transformational leaders inspire their colleagues to feel motivated and exceed expectations in attaining their goals (Bass & Riggio, 2006). Transformational leaders who value individuals evaluate a subordinate's potential for new responsibilities (Bass & Riggio, 2006). Leaders boost subordinates' personal development by assigning challenging tasks (Bass & Riggio, 2006).

Transformational leadership style serves as a safeguard against burnout (Hildenbrand et al., 2018). Transformational leaders who stimulate intellectually help subordinates identify difficulties and develop a new problem-solving method based on knowledge, training, and experience. These problem-solving skills emphasise reason, inventiveness, and excellence (Bass & Riggio, 2006). Transformational leaders can influence organisational commitment by emphasising goal achievement, effort, and success, and encouraging followers and leaders to commit more (Sayadi, 2016). The efficacy of transformational leadership style has been evidenced across diverse contexts and nations globally (Anderson, 2017).

1.1.3 Transactional Leadership Style

‘Transactional leadership style’ is the second most frequently referenced leadership style in the literature (Bolkan & Goodboy, 2009). “Transactional leadership style is a leadership style in which leaders emphasise the desired outcomes from their subordinates and communicate the essential activities to achieve a specific objective” (Bass, 1985, as cited in Bass & Riggio, 2006). A unique rewards model is implemented by transactional leaders, which ensures that subordinates' requests for compensation, recognition, and advancement are satisfied upon the completion of objectives (Bass & Riggio, 2006). Bass and Riggio (2006) noted that ‘transactional leadership style’ can become ineffective if leaders fail to deliver on promised rewards or abandon the approach upon realising that employees can perform well under structured guidance

rather than relying solely on incentives. Bass further argues that this leadership style often results in average or unremarkable outcomes, as transactional leaders typically do not possess the visionary qualities or inspirational drive necessary to encourage followers to prioritise organisational goals over personal interests.

Management-by-exception (MBE) and contingent reward are FRL-inspired transactional leadership styles. Leaders who utilize contingent reward strategies typically establish formal agreements based on effort and outcomes (Bass & Riggio, 2006), and may issue corrective feedback or disciplinary measures when expected goals are not met. Management by exception leaders do not offer new paths after goals are met (Avolio et al., 1999) (as cited in Xenikou, 2017). Managers who emphasise exceptions can be active or passive (Bass & Riggio, 2006). When rules are breached, active managers by exception fix them (Bass & Riggio, 2006). Passive exception-management leaders only act when standards are not met (Bass & Riggio, 2006). Leaders who rely predominantly on 'management-by-exception' lack initiative and goals. Management-by-exception users only act when there is evidence of organisational mismanagement (Bass & Riggio, 2006).

1.1.4 Laissez-faire leadership Style

Bass and Avolio (1994), in their 'Full Range Leadership (FRL) model', identified 'laissez-faire leadership style' as a non-transactional factor characterised by the absence or avoidance of leadership (Tosunoglu & Ekmekci, 2016). Laissez-faire leaders are marked by a lack of decision-making, minimal feedback, and little effort to support followers in meeting their needs or fostering their development (Northouse, 2004) (Bass & Riggio, 2006). These leaders often evade responsibilities, remain absent during critical moments, and fail to address problems even as they escalate. In contrast to the proactive nature of 'transformational leadership style', 'laissez-faire leadership style' is inherently inactive and has been shown to negatively affect subordinate performance (Bass, 1999, as cited in Stewart, 2006).

While laissez-faire leadership style shares features with passive transactional leadership style, notably management-by-exception, researchers maintain that it

reflects an absence of effective leadership practices altogether and should be classified independently (Avolio, 1999; Bass, 1998, as cited in Judge & Piccolo, 2004).

In the field of education, effective school leadership is vital for improving the standards and significance of instructional practices and student learning. Educational leadership research sheds light on the essential traits, responsibilities, and roles that contribute to successful leadership (Pont et al., 2008). School leaders significantly influence institutional capacity, infrastructure needs, and, most importantly, student achievement (Bartanen & Husain, 2021). Effective school leaders foster a motivated environment among teachers, staff, and students, ultimately building the institutional strength and operational excellence of the school. (Guarino et al., 2006). Drawing on decades of prior research, Leithwood et al. (2004) stressed that effective school leadership is a key determinant of educational success.

In today's dynamic educational environment, school principals are required to utilise diverse leadership approaches and competencies to guide their institutions toward common objectives and a clearly articulated vision (Urlick, 2016). 'Perceived leadership style of school principals' refers to how teachers, perceive the 'leadership style of principals.' It is a subjective assessment of 'the principal's leadership style' based on their visible actions, communication, decision-making, and interactions. Understanding how their leadership style is perceived allows school principals to adjust their behaviour to better support their staff, students, and the school community.

Drawing upon Bass's model, Leithwood and colleagues reformulated transformational leadership within the context of education in the 1990s, underscoring its applicability to school leadership (Leithwood, 1994, as cited in Jovanovic & Ciric, 2016). Their work highlighted the distinctive characteristics of transformational leadership in schools, such as fostering a professional culture, supporting teacher development, and enhancing problem-solving capacities. Research has consistently demonstrated that transformational leadership style complements transactional leadership style in effective organisations, with the former augmenting the latter's impact (Bass et al., 2003). For schools to operate successfully, leadership must

incorporate transformational behaviours while appropriately employing transactional strategies (Bass & Riggio, 2006).

Although principals are often burdened with transactional administrative tasks, they are also called upon to provide visionary leadership, shaping the direction of their schools and engaging the wider community in transformative initiatives. Research shows that teachers generally prefer school leaders who exhibit transformational leadership traits. These insights have been discussed in recent literature (Heenan et al., 2023). Numerous studies and empirical evidence indicate that principals who demonstrate transformational leadership foster more open school environments, characterised by trust-building, participatory decision-making, individualized support, and a shared commitment to achieving collective goals (Blatt, 2002).

Research on school principals' perceived leadership styles has suggested mixed results across demographic variables like gender, school type, location, and teacher experience. Female teachers, especially in primary schools, often view principals as transformational leaders who provide personal and professional support (Aydin & Kaya, 2016; Santavirta et al., 2014). On the other hand, male teachers, particularly in secondary schools, tend to perceive principals as more transactional, emphasising discipline and outcomes (Pietsch & Tulowitzki, 2017; Evers et al., 2009). Less experienced teachers in urban settings frequently see principals as authoritarian or transactional due to performance pressures (Zhang et al., 2022; Hoffmann & Kasten, 2017). In contrast, rural schools often associate principals with transformational leadership due to closer community ties (Skaalvik & Skaalvik, 2011).

On the one hand, school principals' leadership styles can lead to teachers' emotional exhaustion, cynicism, and poor performance, which in turn creates a burnout culture and a general decrease in well-being. On the other hand, some leadership styles contribute to reducing burnout through the cultivation of a work atmosphere that prioritises teachers' comprehensive well-being and promotes their engagement, motivation, and resilience.

In the present study, perceived leadership style refers to the ‘leadership styles’ of principals as perceived by secondary school teachers, measured through “Teachers’ Perception of Their School Principal Leadership Style Questionnaire” (Uri Even & Iris Ben David-Hadar, 2021). Teachers' perceptions are shaped by their personal evaluations and interpretations of the principal’s actions, management approaches, and leadership practices. This includes perceptions on the principal's decision-making, communication, support for teachers, and capacity to inspire or lead the school community.

According to Bakker et al. (2023), burnout originates from background, individual personality, and organisational factors. When evaluating an individual's susceptibility to burnout, it is essential to consider their work environment. Research has indicated that ‘principals' leadership styles’ influence teachers, as seen by a review of teachers' work, challenges, and burnout (Kiboss & Jemiryott, 2014). School administration can either intensify or mitigate teacher burnout. Maslach and Leiter (2016) asserted that the absence of support from school administrators is the primary factor linked to teachers' poor psychological well-being. Identifying and assessing principals' leadership behaviour is crucial to ascertain its influence on teachers' levels of burnout, which is a significant issue in the teaching profession.

1.2 Burnout

‘World Health Organisation (WHO)’ has recognised ‘burnout’ as a professional health concern linked to the workplace, as classified in the 11th edition of ‘the International Classification of Diseases (ICD-11)’. It has been defined by WHO as “a syndrome resulting from chronic workplace stress that has not been managed successfully. It is characterised by three dimensions: (a) feelings of energy depletion or exhaustion; (b) increased mental distance from one’s job or feelings of cynicism or negativity related to one’s job and (c) reduced professional efficacy” (WHO, 2019). Moss (2019), in ‘Harvard Business Review’, estimated that close to 190 billion dollars are spent on healthcare expenses because of burnout.

Burnout is a syndrome marked by emotional exhaustion, depersonalisation, and a diminished sense of personal accomplishment that is harmful to the individual and the organisation (Maslach et al., 2001). As highlighted by Rodriguez et al. (2017), "burnout syndrome" emerges when a person is unable to effectively cope with work-related stress, resulting in adverse effects on both mental well-being and physical health within the workplace. Disappointment in one's personal life, health, and work has all been linked to burnout (Becker et al., 2006).

The notion of burnout first appeared in literature through Graham Greene's 1960 novel 'A Burnt-Out Case', which portrays an architect who becomes emotionally drained and loses his sense of purpose in both faith and profession. The term later gained attention within psychological research when Herbert Freudenberger (1974) used it to describe a condition marked by emotional and physical fatigue caused by challenging work environments. Building on this foundation, Christina Maslach (1982) offered a more comprehensive definition, conceptualising burnout as a syndrome involving emotional exhaustion, detachment from work, a weakened sense of professional identity, and a decline in compassion toward those being served.

Subsequent work by Maslach et al. (1993, 2001) further refined the definition, conceptualising 'burnout' as a syndrome consisting of three dimensions: 'emotional exhaustion', 'depersonalisation', and 'reduced personal accomplishment'. They emphasised the detrimental impact of 'burnout' on both individual employees and their organisations. Gil-Monte and Figueredo-Ferraz (2013) described 'burnout' as 'a sense of failure and exhaustion caused by overwhelming demands placed on an individual's energy, resilience, or resources.' Building on this, Rodriguez et al. (2017) characterised burnout syndrome as a failure to effectively cope with work-related stress, leading to adverse physical and psychological outcomes that hinder professional performance. Together, these perspectives highlight burnout as a complex, multifaceted phenomenon with significant implications for individuals and their work environments.

The concept was derived from empirical facts rather than theoretical frameworks. Schaufeli and Enzmann (1998) concluded after a thorough review that burnout is not a novel phenomenon; it has historical origins. However, by the early 1970s, burnout had

been identified as a specific form of chronic ‘work-related stress’, especially common among professionals in human service fields, stemming from a combination of unique contributing factors.

Burnout research has developed over time and can be divided into three major phases. The early stage, spanning the 1970s through the mid-1980s, concentrated largely on case study approaches to explore the possible factors contributing to burnout. Researchers during this period attributed burnout to several contributing factors: personal characteristics, such as excessive dedication and unrealistic expectations; relational dynamics, including mismatches between employees' capacities and the needs of those they serve; emotional labour, involving both the intensity and nature of emotional engagement required; and organisational conditions, such as excessive workload, limited autonomy, and insufficient support systems.

The subsequent phase, from the mid-1980s to the late 1990s, witnessed a rapid expansion of research on burnout, resulting in the publication of more than 1,000 studies. However, many of these studies were cross-sectional, limiting their ability to establish causation. A meta-analysis by Zapf (2002) identified that emotional labour combined with organisational challenges significantly contributed to burnout during this period.

The third phase of burnout research, which began in the late 1990s and continues into the present, saw a transition toward longitudinal approaches that provided deeper insights into the various factors influencing burnout. These studies identified key predictors of emotional exhaustion, including heavy workloads, intense emotional demands, and discrepancies between job demands, autonomy, and support. Burnout is now recognised as a complex condition resulting from prolonged exposure to unfavourable circumstances. Contemporary research aims to pinpoint the specific stressors, both in the workplace and in individuals' personal lives, that initiate and sustain burnout.

Despite considerable progress in research, the distinction between stress and burnout remains a topic of continuous discussion. Innstrand et al. (2002) conceptualised

the stress process in three phases: alert, resistance, and exhaustion. Burnout, as Innstrand et al. (2002) argued, aligns with the exhaustion phase. Maslach (1993) further clarified that burnout is distinguished from stress by the emergence of negative attitudes and behaviours toward colleagues, the job, and the organisation-elements absent in typical stress responses. Pines and Keinan (2005) highlighted that burnout often arises from a failure to find meaning and significance in one's work, affecting individuals who enter their roles with high aspirations and expectations. In contrast, stress is a more generalised response that can affect anyone, irrespective of their expectations or aspirations.

While burnout may be considered a subset of stress, distinctions remain between the two. Pines and Keinan (2005) found that job stressors are more closely linked to inducing strain, whereas the perceived significance of work is more strongly associated with burnout. Montero (2014) highlighted that burnout primarily stems from difficulties individuals face in coping with or regulating workplace stress. These insights underscore the interconnected yet distinct nature of stress and burnout, highlighting the importance of addressing both phenomena to enhance workplace well-being.

Burnout has been linked to reduced job performance, a decline in both psychological and physical health and difficulties in maintaining personal and social relationships (Becker et al., 2006). It has further been linked to adverse health outcomes such as elevated stress levels, greater likelihood of substance use, increased vulnerability to anxiety and depression, and diminished self-esteem (Maslach et al., 2001).

Maslach's foundational work on 'burnout' began in 1976, focusing on interviews with human service professionals to explore the impact of emotional stress on job behaviours. This work culminated in the creation of the 'Maslach Burnout Inventory (MBI)' in 1982, a widely recognised tool used to assess burnout across three key dimensions: 'Emotional Exhaustion', 'Depersonalisation', and 'Personal Accomplishment'. The MBI has since evolved into a key tool for examining the psychological impact of burnout and its broader implications for employee well-being in the workplace.

“Emotional exhaustion refers to the depletion of psychic energy or the draining of emotional resources” (Klusmann et al., 2021). Mental health suffers greatly when people are under excessive amounts of mental stress or have reached a condition of burnout. Damage to one's mental health occurs when negative emotions like worry, tension, frustration, and anger persist for long periods of time without release. One definition of emotional exhaustion is when a person's emotional resources have been depleted due to the constant and demanding needs of those around them (Klusmann et al., 2021).

Depersonalisation includes harsh, unpleasant, and uncaring attitudes toward the other people, expressing the interpersonal aspect of burnout (Maslach et al., 2001). It's connected to the fact that some people exhibit behaviours like neglecting their responsibilities at work, becoming disinterested in the customers they're supposed to be helping, becoming rude or negative, and so on. Depersonalisation occurs when stress is allowed to build up for over a prolonged duration, eventually leading to burnout. Due to burnout, many individuals, including teachers and professionals, begin to crave isolation (Hamann & Gordon, 2000). Depersonalised persons stop caring about the needs of those around them. Negative, disconnected, harsh, and dehumanising behaviour toward other people emerges out of nowhere in a depersonalised person. When people are depersonalised, they may not value themselves very highly. As a result, individuals may experience diminished motivation to carry out their professional duties and responsibilities (Hamann & Gordon, 2000).

Burnout's self-evaluative dimension of low personal accomplishment is the development of a sense of inadequacy and failure. Therefore, the individual tends to have a low opinion of himself or herself (Maslach, 2001). Those who struggle with this outlook tend to believe that they are either not getting ahead at work or falling behind, that their efforts are fruitless, and that they are not contributing anything positive to the world around them (Leiter & Maslach, 1988).

Burnout has been most commonly assessed using standardised questionnaires. Among the most widely utilised instruments is the ‘Maslach Burnout Inventory (MBI),’ developed by Maslach and Jackson, which measures burnout through three dimensions:

“emotional exhaustion, depersonalisation, and reduced personal accomplishment.” Other notable tools include the ‘Burnout Measure (BM)’ by Pines and Aronson and the ‘Maslach Burnout Inventory-General Survey (MBI-GS),’ which offers a broader application beyond human service professions.

In the present study, ‘burnout’ refers to a psychological syndrome involving attribution of ‘exhaustion’ to three specific domains in the person's life-that is, overall exhaustion, exhaustion linked to one’s work, and exhaustion associated with interactions involving clients and was measured through ‘Copenhagen Burnout Inventory (CBI),’ developed in 2004. Unlike MBI, which emphasises three components of burnout, the CBI focuses specifically on exhaustion and its attribution by the individual. The ‘CBI’ comprises three distinct scales: ‘personal burnout’ which measures ‘general exhaustion without specific attribution;’ ‘work-related burnout’ which assesses ‘exhaustion attributed to the individual’s work in general;’ and ‘client-related burnout’ which evaluates ‘exhaustion attributed to work with clients.’ In this context, students were regarded as clients.

The ‘CBI’ defines ‘personal burnout’ as "a state of prolonged physical and psychological exhaustion;" ‘Work-related burnout’ as "a state of prolonged physical and psychological exhaustion perceived as related to the individual’s work" and ‘Client-related burnout’ as "a state of prolonged physical and psychological exhaustion perceived as related to the individual’s work with clients." These scales provide a nuanced understanding of burnout by distinguishing its origins, enabling a more targeted approach to addressing its causes and implications.

1.2.1 Teacher Burnout

Growing awareness in contemporary mental health research highlights its essential connection to overall quality of life. According to ‘World Health Organisation (WHO),’ mental health enables individuals to cope with daily stressors, sustain productive work, build meaningful relationships, and contribute to their communities. The WHO further notes that mental health outcomes are shaped by a dynamic interaction of psychological, biological, social, and environmental influences. Studies,

including those by Sprang et al. (2007), have identified a link between employment in human service professions-such as teaching, healthcare, and social work-and higher levels of psychological strain. Findings from multiple studies suggest that teachers, in particular, are vulnerable to elevated work-related stress, which may lead to significant and lasting effects on both their mental and physical health.

Burnout is a critical psychological condition that impacts both personal well-being and the overall effectiveness of institutions, including educational settings such as schools. According to Hendrickson (1999, as cited in Doney, 2018), teacher burnout refers to a condition marked by psychological, emotional, and behavioural fatigue caused by work-related stress, leading to reduced enthusiasm for teaching and diminished instructional effectiveness. Teacher stress is marked by the development of negative emotional responses, such as heightened worry, irritability, nervousness, hostility, and feelings of sadness, arising from the diverse pressures and challenges faced within the school setting. Burnout, in contrast, is the outcome of prolonged exposure to such stress, manifesting primarily as physical, emotional, and attitudinal exhaustion (Kyriacou, 2015).

Schaufeli et al. (2009) explained that teacher burnout arises when educators perceive a mismatch between the pressures they face and the support or resources at their disposal, ultimately creating an unsustainable work environment. This imbalance highlights the critical need for addressing both the demands on teachers and the support structures provided to mitigate the risk of burnout and its far-reaching consequences for educators and their institutions. People stop placing significance on participating in professional and personal events once they feel emotionally drained. Those teachers who suffer from burnout lose all interest and enthusiasm for their profession. There comes a point in everyone's day when they just want to get through the motions and get to bed (Schwab, 1983). If teachers lose their enthusiasm, they are less likely to take their work seriously. An emotionally drained individual may feel uncomfortable and unmotivated about going to work because she or he has convinced herself or himself that she or he is no longer capable of completing the demands of his or her job (Maslach et al., 2001).

The teaching profession is marked by significant emotional and psychological pressures, which can contribute to feelings of exhaustion, detachment from one's role, reduced sense of effectiveness, and lower levels of job satisfaction (Skaalvik & Skaalvik, 2007). As Aiken et al. (2002) noted, when the demands placed on individuals consistently surpass the support and resources at their disposal, their capacity to cope may become compromised. The lack of opportunities for rest and recovery further aggravates the effects of this imbalance, heightening the likelihood of experiencing burnout.

Burnout among teachers has been linked to significant physical and mental health challenges, leading to reduced performance and increased absenteeism (Schaufeli et al., 2009). Moreover, the way teachers cope with stressful events in the school environment is closely linked to their sense of efficacy, which can influence their resilience against burnout (Skaalvik & Skaalvik, 2007). The effects of teacher burnout are not limited to the individual alone but also influence the broader classroom environment. Elevated burnout levels among teachers have been associated with a rise in student behavioural problems and a decline in academic achievement, highlighting the far-reaching consequences of stress and exhaustion within schools (Skaalvik & Skaalvik, 2007).

Burnout among teachers tends to be infectious, breeding dissatisfaction and negativity within the educational system, and, if left unchecked, can progressively erode and destabilise the entire system (Dworkin et al., 2003). When looking at the teaching profession, researchers have concluded that principals' leadership styles have an impact on teachers' workloads, morale, and rates of burnout (Kiboss & Jemiryott, 2014). Maslach and Leiter (1997, as cited in Skaalvik & Skaalvik, 2017) identified lack of administrative support as a primary contributor to teachers' low mental health, leading to burnout and reduced instructional effectiveness.

1.3 Theoretical Framework

'The Job Demands-Resources (JD-R) theory,' introduced by Demerouti et al. (2001), provides a theoretical framework for analysing how burnout develops within

workplace settings by focusing on the interaction between job demands and available resources. This theory offers valuable perspectives on how leadership styles can shape employee experiences by affecting both the expectations placed upon them and the support structures made available. According to JD-R model, ‘burnout’ occurs when the pressures and demands of work—such as excessive workload, emotional strain, and limited time—surpass the available resources like support, autonomy, and positive feedback.

According to JD-R model, ‘job demands’ refer to those aspects of work that require continuous physical or psychological effort and may consequently result in fatigue, stress, or strain. In contrast, ‘job resources’ denote the physical, social, and organisational factors that enable employees to accomplish work goals, buffer the effects of stress, and foster both personal and professional growth. When these supportive resources are lacking and job demands remain high, employees become more vulnerable to burnout, which typically manifests as emotional exhaustion, feelings of disconnection from their professional responsibilities, and a decline in perceived effectiveness.

Leadership is closely linked to the JD-R framework, as highlighted by Diebig et al. (2017) and Cheung et al. (2021). Researchers examining the intersection of leadership and the JD-R model suggest that employees' perceptions of leadership behaviours significantly impact their work experiences. Leadership directly influences ‘job demands’, ‘job resources,’ and ‘personal resources,’ thereby shaping the overall work environment. Leadership styles are crucial in either intensifying or reducing the risk of burnout by influencing how work pressures and available supports are managed. Effective leadership can mitigate burnout by enhancing job resources and personal development, while ineffective leadership may increase burnout by amplifying demands or failing to provide adequate support.

Autocratic and transactional leadership styles emphasise control and performance, often heightening work demands while limiting access to supportive resources. Transactional leaders use performance-based rewards and punishments, which can put employees under strain without offering emotional or social support.

These leadership styles increase effort, time pressure, and accountability, which can lead to emotional exhaustion. This imbalance causes burnout because employees feel overwhelmed by the obligations imposed on them without enough autonomy or support to manage the stress (Shimony, 2022; Fleming, 2023).

By creating a supportive and empowering workplace, transformational leadership improves job demand-resource balance. Transformational leaders inspire employees, promote a shared vision, and stimulate their minds. The JD-R framework suggests that transformational leaders minimise ‘job demands’ by building supportive and valued workplaces, reducing stress and burnout. They also boost job resources by providing social support, professional development, and autonomy. This leadership style promotes engagement and a sense of accomplishment, avoiding burnout and improving employees' resilience and job performance.

Laissez-faire leadership, marked by minimal guidance and participation, can also result in fatigue. The JD-R model posits that without leadership guidance, individuals may encounter heightened job pressures stemming from ambiguous roles, duties, and objectives. This leadership style frequently neglects to furnish essential job resources, including feedback, guidance, and emotional support, resulting in employees having to navigate high demands autonomously. Insufficient resources increase the likelihood of burnout, since employees feel overwhelmed by ambiguity and a lack of support in their work surroundings

Drawing on the ‘Job Demands–Resources (JD-R) theory,’ this study explores how ‘perceived leadership styles’ are associated with varying levels of ‘burnout’ among teachers. The JD-R model suggests that ‘teacher stress’ and ‘burnout’ are determined by how individuals interpret ‘job demands’ and the extent of ‘job resources’ accessible to them (Hakanen et al., 2006, as cited in Saloviita et al., 2021). When teachers experience a mismatch between the requirements of their job and the resources available to address them, their psychological well-being may be compromised, potentially leading to burnout (Tummers & Bakker, 2021).

The interaction between school principals' leadership styles and teacher burnout can also be analysed through the lens of the JDR framework (Demerouti et al., 2001). Schools are inherently complex environments where job demands encompass a range of factors at both individual and organisational levels, such as excessive workloads, role conflicts, school climate challenges, interpersonal conflicts, and student behavioural issues (Hakanen et al., 2006; Skaalvik & Skaalvik, 2010). Conversely, important 'job resources' in the teaching profession include autonomy at work, a positive social environment, teacher self-efficacy, support from colleagues and school leaders, participation in school decisions, acknowledgment from the community, and access to professional growth opportunities (Salanova et al., 2005).

Extensive research supports the 'JD-R model,' highlighting the critical roles of 'job demands and resources' in influencing 'burnout.' While high job demands increase the risk of 'burnout' by exhausting emotional and physical energy, the presence of adequate job resources can mitigate this risk by promoting resilience and engagement (Hakanen et al., 2006, as cited in Saloviita et al., 2021). This framework highlights the significant role of 'leadership' in balancing 'job demands' and 'resources' to safeguard teachers' well-being and effectiveness.

Hence, the present study was directed towards investigating "perceived leadership styles of principals" in relation to "burnout" among secondary school teachers.

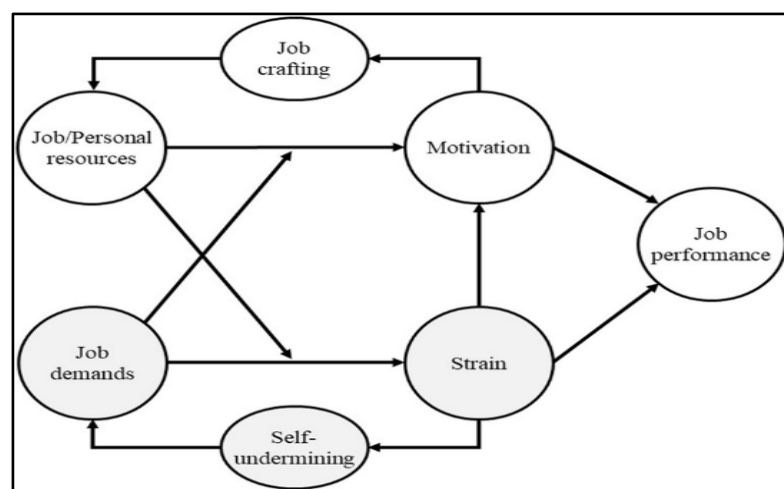


Figure 1.1: 'The Job Demands–Resources (JD-R) theory' (adapted from Bakker & Demerouti, 2017)

1.4 Workplace Bullying

‘Workplace bullying’ can act as an intermediary in the relationship between ‘leadership styles’ and ‘burnout,’ intensifying the detrimental effects of ‘authoritarian,’ ‘transactional,’ and ‘laissez-faire’ leadership styles on employee well-being. A study by Blase and Blase (2002) found that principals who exhibited controlling and unsupportive leadership behaviours contributed to increased levels of teacher victimization and bullying, as teachers in these environments often felt isolated, powerless, and targeted by both leaders and peers. This can expedite the trajectory towards burnout when employees perceive themselves as constrained and unable to confront the bullying behaviour.

On the other hand, transformational leadership style, which emphasises empathy, empowerment, and acknowledgement, can mitigate and alleviate bullying (Fleming et al., 2023), hence fostering a safer and more supportive workplace that diminishes the likelihood of burnout. By confronting workplace bullying, schools may disrupt the detrimental loop of ineffective leadership styles and burnout, promoting a better and more productive work environment.

‘Workplace bullying’ refers to situations in which one or more employees are repeatedly subjected to negative or harmful behaviour within the work environment. ‘Bullying’ in the workplace is conceptualized as repeated exposure to systematic and primarily psychological negative behaviours, and has been described by European scholars (Einarsen et al., 2003) as: “harassing, offending, socially excluding someone or negatively affecting someone’s work tasks. For the label bullying (or mobbing) to be applied to a particular activity, interaction, or process, it has to occur constantly and repeatedly (e.g. weekly) and over a period (e.g. about six months).”

Research into ‘workplace bullying’ emerged in the early 1980s, with scholars employing terms like mobbing, psychological abuse, and hostile behaviour to characterise the issue (Einarsen & Skogstad, 1996). Dan Olweus, a Norwegian psychologist, first coined the term ‘bullying’ to describe aggressive behaviour between

schoolchildren. Later, Heinz Leymann introduced the term "mobbing" into psychology to describe the prolonged exposure of employees to various forms of negative behaviour, leading to significant deterioration in their mental health and social position within the workplace. Early definitions, therefore, include Leymann, the Swedish-German researcher's (1990) description of 'workplace bullying'-also known as 'mobbing'-as "hostile and unethical communication systematically directed by one or more individuals toward a target" (Lutgen-Sandvik et al., 2007). Andrea Adams (1990), the BBC journalist, however, popularized the issue of 'workplace bullying' in the UK through BBC broadcasts, drawing significant attention to the issue and encouraging further research.

Workplace bullying involves prolonged and systematic mistreatment, characterised by frequent harassing behaviours aimed at a target individual (Einarsen & Skogstad, 1996). Such behaviours include verbal abuse, social exclusion, rumour-spreading, personal attacks, and the withholding of necessary information (Einarsen et al., 2009). The European perspective views 'workplace bullying' as a prolonged process, typically spanning at least six months, during which seemingly small negative behaviours progressively develop into an ongoing pattern of mistreatment (Einarsen, 2009; Salin, 2008). These acts can pertain to personal issues, such as insults or humiliation, or work-related issues, such as isolation or denying access to resources (Cowie et al., 2002).

Researchers have described workplace bullying as a relational issue that typically arises from ongoing and intensifying conflict between individuals or groups (Einarsen et al., 2003). As the conflict escalates, the targeted individual often ends up in a powerless position, experiencing repeated harmful behaviours from peers or superiors, ultimately losing control over the circumstances (Einarsen et al., 2009). Viewed through the lens of stress theory, bullying in the workplace is categorised as a form of social stressor-comparable to frequent, low-level challenges-that gradually erodes an individual's mental resilience and well-being.

Einarsen et al. (2009) classified 'workplace bullying' into three forms: 'work-related', 'person-related', and 'physically intimidating bullying.' 'Work-related

bullying' involves actions that complicate work processes, such as unreasonable deadlines, withholding information, or assigning unmanageable workloads. 'Person-related bullying' includes behaviours like social exclusion, gossip, or the spreading of rumours. 'Physically intimidating bullying' involves overt actions such as shouting, threatening, or intimidating behaviour. 'Workplace bullying' is defined as being exposed to 'two or more negative acts' over 'a period of at least six months,' during which the individual feels unable to prevent or escape the harmful treatment (Lutgen-Sandvik, 2007).

Workplace bullying is recognised as a particularly potent workplace stressor, surpassing traditional stressors such as high workloads or lack of decision-making autonomy. Unlike general workplace stressors, bullying involves targeted and systematic mistreatment, often marked by humiliation, criticism, or exclusion (Agervold, 2007). This behaviour persists over extended periods, leaving victims feeling powerless to address the situation and leading to adverse psychological and work-related outcomes (Hauge et al., 2010).

'Workplace bullying' often leads to an unequal distribution of power, where the perpetrator holds dominance over the target. Victims often struggle to defend themselves against the perpetrator's actions, becoming stigmatized into inferior positions (Einarsen & Skogstad, 1996; Zapf & Gross, 2001). Workplace bullying undermines workers' mental and physical health, lowers their satisfaction with their jobs, reduces their dedication to the organisation, and contributes to higher levels of depression and intentions to leave.

Among the various factors contributing to employee stress and dissatisfaction, bullying has been identified as a critical issue. Uppal (2005) highlighted that bullying significantly lowers employee job satisfaction. Mehmood et al. (2024) found that workplace bullying adversely impacts employee performance, with psychological well-being mediating this relationship. Relationships between organisational stress and bullying have also been established, with bullying victims frequently experiencing psychological and psychosomatic illnesses (Einarsen et al., 1998). Davenport et al. (2003, as cited in Cemaloglu, 2011) identified personal traits of both perpetrators and

victims, organisational environments, and leadership styles as significant contributors to workplace bullying.

Van den Broeck et al. (2011) investigated the validity of the ‘Job Demands-Resources (JD-R) model’ in explaining ‘workplace bullying’, considering both perpetrators' and targets' perspectives. Their findings revealed that ‘job demands’ were positively associated with both perpetrator’s and target’s reports of bullying, while ‘job resources’ were negatively associated with bullying experiences. When job resources were abundant, individuals engaging in bullying behaviours were more likely to acknowledge such actions, indicating that disparities between job demands and available resources can shape both the occurrence and perception of bullying. The study concluded that effective job design, including limiting excessive demands and enhancing job resources, can mitigate workplace bullying, reinforcing the importance of organisational strategies in addressing this phenomenon.

In the present study ‘workplace bullying’ refers to “harassing, offending, socially excluding someone, or negatively affecting someone’s work. For the label bullying to be applied to a particular activity, interaction or process it must occur repeatedly and regularly (e.g. weekly) and over a period (e.g. about six months)” (Einarsen et al., 2003). In this study, ‘workplace bullying’ was measured through the “Negative Acts Questionnaire-Revised (NAQ-R) (Einarsen and Raknes, 1997, Revised 2009)”, which comprises three dimensions: ‘work-related bullying,’ ‘person-related bullying,’ and ‘physically intimidating bullying’.

1.4.1 Workplace Bullying in Schools

‘Workplace bullying’ in schools has increasingly been recognised as a serious issue, especially due to its profound effects on teachers and the overall school climate. Teachers, often referred to as nation builders (Pradhan, 2014), hold a key position in enhancing the learning process, and their wellness is closely connected to positive school relationships and improved student outcomes. However, over the last three decades, studies across the globe have consistently reported various kinds of mistreatment teachers face at work. One particularly concerning form of mistreatment

is workplace bullying, which has numerous detrimental outcomes for the target (Brousse et al., 2008).

Some studies have suggested that certain industries may be more susceptible to higher incidences of ‘workplace bullying’, such as healthcare, finance, education, and manufacturing. ‘The Fifth European Working Conditions Survey (2011–2012)’, conducted by Eurofound (2012), revealed that the education sector is among the industries reporting the most frequent instances of workplace bullying.

Research by Fisher-Blando (2008) highlighted that ‘workplace bullying’ is more prevalent than sexual harassment or physical assault, a finding that holds true even in educational settings where teachers are supposed to foster a nurturing environment. The pressure to meet educational goals, heavy workloads, and strained relationships with administrators or colleagues can exacerbate this problem. Studies indicate that 75% of employees, including those working in education, encounter bullying at some stage in their professional lives.

This study used ‘Negative Acts Questionnaire-Revised (NAQ-R; Einarsen et al., 2009)’ to assess the extent of ‘workplace bullying’ among teachers. It has been a widely used tool designed to measure ‘workplace bullying’ by assessing the frequency of negative acts experienced by employees. The questionnaire focuses on behaviours rather than labels of bullying, providing a comprehensive way to evaluate bullying in various organisational settings. It includes items related to personal harassment, work-related bullying, and social exclusion. Teachers report the frequency with which they encounter such behaviours, enabling researchers to assess both the extent and intensity of ‘workplace bullying.’

The widespread occurrence of ‘workplace bullying’ and its harmful psychological consequences highlight it as a significant threat to employees' psychosocial well-being in today's work environments. Therefore, it is essential to examine the underlying factors that lead to the occurrence of bullying within organisations. Both theoretical perspectives and empirical findings highlight that leadership styles play a pivotal role in shaping the probability of bullying among employees (Hoel et al., 2010).

Inadequate leadership, characteristic of 'laissez-faire leadership style', can lead to frustration and stress within the work group, potentially resulting in interpersonal tensions, heightened conflict, and antisocial behaviours such as 'workplace bullying' (Einarsen, 1999; Skogstad et al., 2007). Empirical evidence demonstrates that 'laissez-faire leadership style' adversely affects workplace aggression, correlating with interpersonal conflicts and bullying (Hoel et al., 2010; Skogstad et al., 2007).

'Transformational leadership style' fosters supportive environments that reduce bullying, while authoritarian and laissez-faire styles are linked to higher rates of bullying (Zhang et al., 2022). Transformational leaders have been shown to mitigate bullying through emotional support, whereas disengaged leaders saw increased incidents (Nielsen et al., 2021). Transformational leaders exhibit charisma and inspiration towards their subordinates, motivating them to perform at their highest potential in a constructive and personalised manner (Bass & Avolio, 1993, as cited in Avolio & Yammarino, 2013). Employees led by transformational leaders often develop a strong sense of trust and respect for their supervisors, feeling that their emotional needs are acknowledged and supported. As a result, this leadership approach tends to encourage healthier relationships not only between leaders and subordinates but also among peers, potentially minimising the likelihood of workplace bullying. In their study, Dussault and Frenette (2015) observed that both 'transformational' and 'transactional' leadership approaches help cultivate a positive organisational climate that discourages bullying behaviours. Transformational leaders, in particular, who prioritise the growth and well-being of individual team members, are likely to discourage interpersonal conflict and create a culture that does not condone bullying.

Burnout tends to be more prevalent in professions that require frequent and intense social interaction, with research showing that teachers experience some of the highest levels of burnout among social service professionals (Chakraborty & Singh, 2021). Numerous studies have demonstrated that high work pressures are a primary contributor to burnout, which can adversely affect professionals across various fields, including education. Research exploring the relationship between 'workplace bullying' and 'burnout' has found a significant association between the two across multiple occupational sectors (Bernotaite, 2017). While the impact of different 'leadership styles' on burnout has been explored, limited attention has been given to the underlying

mechanisms, such as potential mediating variables, in the link between leadership approaches and burnout among teachers. Consequently, the role of mediators in this relationship remains insufficiently understood.

There are several individual (psychological capital, grit, motivation, hardiness, etc.) and environmental factors (organisational climate, work- life balance, leadership styles, etc.) that can affect the physical and mental well-being of the teachers and may subsequently lead to burnout; out of these aforementioned factors, leadership styles of principals are of utmost importance. Hence, the present study aimed to examine the role of ‘workplace bullying’ in the relationship between ‘secondary school teachers’ perceptions of their principals’ leadership styles’ and ‘burnout.’

1.5 Psychological Empowerment

Empirical evidence indicates that leadership styles exert a multifaceted influence on workplace bullying, producing both constructive and adverse effects. Among various leadership approaches, transformational and autocratic styles have been recognized as significant factors shaping the occurrence and intensity of bullying behaviours in the workplace. For instance, transformational leadership can help curb bullying by fostering transparency and cultivating a collaborative, encouraging workplace atmosphere (Stouten et al., 2010). Conversely, autocratic, or authoritarian leadership styles may increase the likelihood of bullying by fostering environments that encourage dominance and power imbalances (Pieterse et al., 2010). This dual nature of leadership's impact highlights the importance of identifying certain variables to better understand under what conditions leadership styles either exacerbate or mitigate bullying.

Though there are several factors, one such individual factor is ‘psychological empowerment’. ‘Psychological empowerment’ refers to the sense of control, competence, and meaningfulness employees feel in their roles. Studies suggest that employees who experience a sense of ‘psychological empowerment’ demonstrate greater resilience against the adverse impacts of ineffective leadership, potentially reducing their vulnerability to workplace bullying. On the other hand, when psychological empowerment is low, even leadership styles typically associated with

positive outcomes, such as 'transformational leadership,' may not be effective in reducing workplace bullying. Therefore, examining psychological empowerment as a moderating factor could offer deeper insights into how and under what conditions leadership styles influence the occurrence of bullying within organisational settings (Pieterse et al., 2010).

When teachers experience a sense of empowerment, they are more likely to demonstrate the confidence, self-efficacy, and motivation necessary to confront and counteract bullying behaviours. Teachers who are empowered are also more resilient and more equipped to negotiate challenging work circumstances, which reduces the incidence of bullying and victimisation. In contrast, teachers who lack psychological empowerment may be more prone to the negative impacts of autocratic or laissez-faire leadership, which can contribute to the development of a bullying culture. Schools that promote psychological empowerment can improve their teachers' ability to cope with and prevent bullying, regardless of leadership style, resulting in a safer and more supportive work environment. Psychological empowerment can buffer the association between leadership style and workplace bullying, acting as a protective factor that reduces the harmful impacts of unsupportive leadership on bullying experiences among employees.

Psychological empowerment (PE) has its roots in Bandura's (1977, 1982) work on self-efficacy and pertains to employees' cognitive perceptions regarding their roles. It is understood as an internal psychological condition that signifies an individual's proactive engagement with their work role (Thomas & Velthouse, 1990, as cited in Seibert et al., 2011). Thomas and Velthouse (1990) introduced the term "psychological empowerment" for the first time in the literature and developed a widely recognised framework for psychological empowerment, focusing on four key dimensions: 'meaning', 'competence', 'self-determination', and 'impact'. These dimensions describe how employees perceive the significance of their work, their confidence in their abilities, the autonomy they feel in making decisions, and their influence on organisational outcomes.

Spreitzer (1995) expanded on Thomas and Velthouse's (1990) framework by empirically validating these dimensions and demonstrating their importance in leading to beneficial results in the workplace, such as enhanced job satisfaction and greater dedication to the organisation. 'Psychological empowerment' promotes a workplace in which employees demonstrate higher involvement and are less vulnerable to negative experiences like workplace bullying, as they feel greater control and appreciation in their roles.

According to Spreitzer (2007), the four components of 'psychological empowerment' collectively represent a proactive approach to one's role at work, with each dimension contributing to the overall perception of empowerment as a unified experience. One key dimension, 'meaning,' refers to the alignment between an individual's personal values, beliefs, and behaviours, and the demands or purpose of their job. It instils a sense of meaning and clarity in an individual's professional activities. When there is harmony between an individual's goals and the broader goals of the organisation, a strong sense of mutual commitment may develop. This shared sense of purpose can foster a deeper connection with the organisation and enhance feelings of psychological empowerment.

'Competence' reflects an individual's belief in their ability to perform work tasks successfully and involves a realistic evaluation of their own knowledge, skills, and strengths in relation to job requirements. This concept is closely associated with self-efficacy, or the confidence in one's capacity to accomplish tasks effectively (Bandura, 1977, as cited in Schunk & DiBenedetto, 2020). It is closely linked with the concept of self-efficacy, or confidence in one's capacity to perform effectively. When individuals hold a strong belief in their abilities, they tend to tackle tasks with greater dedication and proactively pursue opportunities for growth within the workplace.

'Self-determination,' as one of the core dimensions of 'psychological empowerment,' denotes the perception of autonomy and control individuals experience in their professional roles. It signifies an individual's perceived autonomy in decision-making, task execution, and control over work processes. Self-determination in the workplace empowers employees to shape their approach to duties, fostering

accountability and genuine engagement in their work outcomes. Spreitzer's (1995) concept of 'psychological empowerment' posits that self-determination is essential for augmenting motivation and engagement. Employees endowed with self-determination are more inclined to demonstrate proactive behaviours, assume initiative, and possess confidence in their decision-making. This thus enhances job satisfaction and overall performance.

'Impact' refers to how individuals assess their ability to bring about meaningful changes or influence important outcomes within their organisation. It specifically indicates the extent to which an employee believes their actions can significantly influence the strategic, administrative, or operational facets of their work environment. When employees perceive a substantial sense of impact, they believe their contributions are vital to the organisation's objectives and that their job transcends mere mundane chores. This perception of influence cultivates enhanced involvement in job tasks, as individuals feel enabled to affect organisational results. Spreitzer's research emphasises that individuals who view their work as meaningful and impactful tend to demonstrate greater initiative, creativity, and job satisfaction, as they perceive their efforts to contribute to broader organisational goals.

'Psychological empowerment' contributes significantly in enhancing both job satisfaction and overall psychological well-being (Spreitzer, 2007). It is also recognised as a key element within various health promotion frameworks (Arneson & Ekberg, 2006). In rapidly evolving work environments that demand adaptability, innovation, and proactive behaviour, psychological empowerment is viewed as a vital resource that enables employees to navigate and thrive amid continuous change (Spreitzer, 1995).

1.5.1 Teachers' Psychological Empowerment

During the 1980s, educational reforms began to take shape across Western countries, marking a shift in how decision-making and leadership were distributed within schools. This period also saw the emergence of teacher empowerment as a significant concept, with increasing recognition that meaningful changes in education require teachers to act not only as practitioners but also as leaders. The integration of

empowerment into education signalled a move toward valuing teachers' voices in shaping school practices and professional development.

In the 21st century, teachers are regarded as autonomous professionals capable of informed pedagogical decision-making (Tschannen-Moran, 2009; Wan, 2005). The foundation of teacher empowerment rests on the idea that educators possess the ability to influence their work environment and outcomes through personal agency and initiative (Bandura, 2001; Spreitzer, 1995). Spreitzer (1995) conceptualised 'psychological empowerment' as a state characterised by four key cognitions: 'meaning,' 'competence,' 'autonomy,' and 'impact'-each representing an active engagement with one's professional role. This framework closely aligns with the idea of intrinsic motivation in the workplace.

The significance of psychological empowerment in educational settings has been widely acknowledged by scholars due to its potential to enhance both teaching quality and school climate. When teachers feel empowered, they tend to take greater ownership of their classrooms, feel trusted by administrators, and are more likely to implement innovative and student-centred teaching methods. Empowered teachers typically exhibit stronger motivation, dedication, and organisational commitment (Sagnak, 2012; Vecchio et al., 2010), which, in turn, support school leaders in cultivating a dynamic and effective educational climate.

In the present study, 'Psychological Empowerment' refers to "an intrinsic motivation manifested in four cognitions (meaning, competence, self-determination, and impact) reflecting an individual's orientation to his or her work role" (Spreitzer, 1995). Spreitzer's 'Psychological Empowerment Scale (PES) (1995)' was utilised to measure teachers' perception of empowerment in their work context through four key dimensions: 'meaning,' 'competence,' 'self-determination,' and 'impact'. These dimensions reflect how employees feel about the significance of their work, their confidence in performing tasks, their autonomy in decision-making, and their ability to influence outcomes. The scale emphasizes that true empowerment is not just about granting authority but fostering an intrinsic sense of motivation and engagement. By

assessing these dimensions, the study aimed to understand how teachers' feelings of empowerment contribute to their well-being.

Several studies have explored the ways in which school principals at different educational levels influence teachers' sense of autonomy. Research has also examined both institutional and individual factors that foster or result from teachers feeling more empowered in their roles. However, despite these contributions, investigations specifically focusing on teachers' psychological empowerment remain limited and insufficient in the current body of literature.

Existing research suggests that fostering psychological empowerment in teachers may help reduce not only their vulnerability to workplace bullying but also lessen the impact of burnout, thereby enhancing their overall performance. For example, Laschinger et al. (2010) found a negative association between experiences of 'bullying' and 'psychological empowerment'. In the same way, Ren and Kim (2017) highlighted that high levels of 'psychological empowerment' can effectively shield against the damaging effects of 'bullying' in the workplace.

Although the link between 'perceived leadership styles' and 'workplace bullying' has been well established, the moderating influence of 'psychological empowerment' has been comparatively underexplored in academic research, especially within educational settings (Ozaralli, 2015). This study addressed that gap by examining psychological empowerment not merely as an outcome of leadership but as a potential moderating factor that may operate independently to influence how leadership styles relate to workplace bullying. The study also aimed to understand whether psychological empowerment could reduce the likelihood or intensity of bullying experienced under different leadership styles.

Building upon theoretical and empirical foundations, the present study was conceptualised to explore the interrelationship between 'perceived leadership styles' of principals and 'burnout' of teachers, incorporating 'workplace bullying' as a mediating variable and 'psychological empowerment' as a moderating variable. It posited that workplace bullying may serve as a mechanism through which leadership styles impact

burnout, while ‘psychological empowerment’ may moderate the relationship between ‘leadership styles’ and ‘bullying’. In essence, the study aimed to provide a more nuanced understanding of how leadership practices, psychological resources, and negative workplace experiences interact to influence teacher burnout.

In the present study, teachers from the secondary stage of schooling were selected owing to the pivotal role this phase plays in fostering students' cognitive and intellectual development. During this stage, learners begin to develop independent thought processes and critical reasoning skills. Teachers are tasked with the significant responsibility of nurturing these abilities by shifting the focus from ‘what to think’ to ‘how to think’ (Souza et al., 2020). However, this shift presents substantial challenges for teachers, including the need to adopt innovative pedagogical approaches, manage diverse learner needs, and meet academic expectations within rigid curricular structures. These demands often contribute to increased workload, emotional strain, and professional stress, potentially affecting their well-being and overall effectiveness in the classroom.

In this study secondary school teachers, refer to teachers (teaching classes 9-10) and having a qualification of graduation with B.Ed. working in government and private schools affiliated to/recognised by the Board of Secondary Education, Assam. In the current study, the researcher tried to find out how far perceived leadership styles, workplace bullying and psychological empowerment were related to burnout of secondary school teachers. Hence, the present research was undertaken to investigate the “perceived leadership styles of principals and burnout among secondary school teachers of Assam and the role of workplace bullying and psychological empowerment in their relationship.”

1.6 Conceptual Framework of the Study

Building on the review of literature on ‘perceived leadership styles’ and ‘burnout,’ ‘perceived leadership styles’ and ‘workplace bullying,’ ‘workplace bullying’ and ‘burnout’, ‘psychological empowerment’ and ‘workplace bullying’, the current model involved testing for the indirect effect of perceived leadership styles on burnout via the proposed mediator, workplace bullying, with the direct and indirect effects being

moderated by psychological empowerment. There was a first-stage moderator in this model as psychological empowerment is moderating path A.

The conceptual framework was based on Andrew Hayes' Model 4 and Model 7. Model 4 was used to examine the simple mediation mechanism, where 'workplace bullying' mediates the relationship between 'leadership styles' and 'burnout'. Model 7 was used to test moderated mediation, specifically assessing whether psychological empowerment moderates the effect of 'leadership styles' on 'workplace bullying' (first-stage moderation) and thereby influences the indirect pathway to burnout. For conducting moderated mediation in Hayes' PROCESS macro, Model 7 was applied, as it allowed examination of both the mediating role of 'workplace bullying' and the conditional (moderated) effect of 'psychological empowerment.'

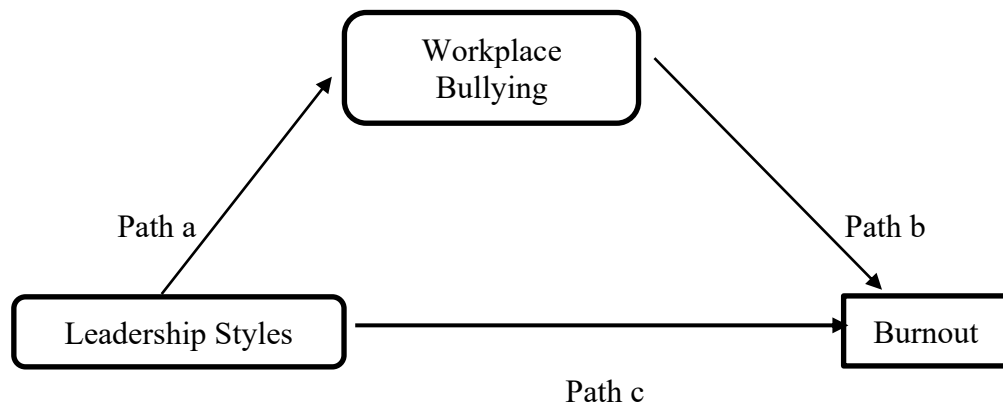


Figure 1.2: Mediating Role of Workplace Bullying in Perceived Leadership Styles and Burnout among Teachers

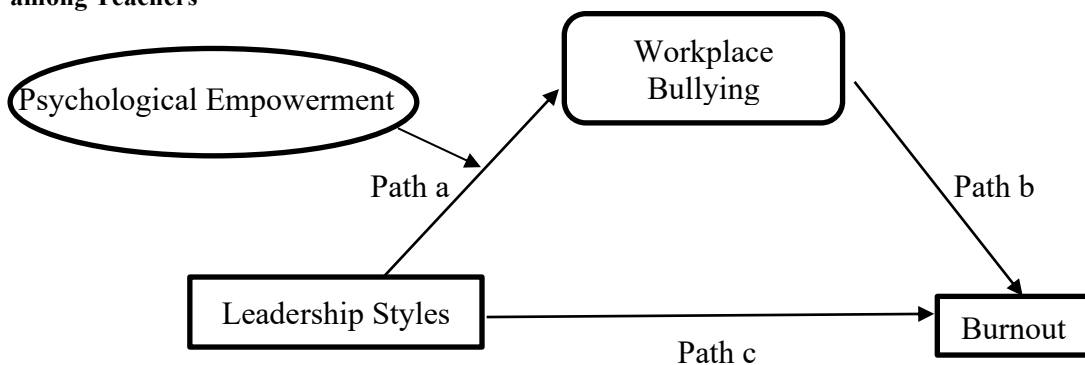


Figure 1.3: Moderated Mediation Model Incorporating Psychological Empowerment (Adapted from Hayes, 2018)

1.7 Significance of the Study

'Goal 3 of the Sustainable Development Goals (SDGs)', established by the United Nations in 2015, emphasises the global commitment and underscores the global

pledge to safeguard health and enhance well-being for people of all ages by 2030. In this context, it is essential that teachers also experience well-being, as their mental and emotional health directly impacts student outcomes. Given that burnout, workplace bullying, and psychological empowerment are closely linked to overall well-being, the present study gains relevance and importance.

The complexities and demands of contemporary work environments have contributed to a growing issue known as "burnout," particularly impacting dedicated professionals in caregiving fields such as education, healthcare, and law enforcement (Vash, 1980, as cited in Al-Omari et al., 2008). Early research on burnout highlighted that prolonged involvement in such emotionally demanding roles can lead to 'emotional exhaustion, depersonalisation, and a diminished sense of professional accomplishment.'

In the Indian context, 'job burnout' has emerged as a critical concern, driven by escalating levels of occupational stress. Findings from Microsoft's 2020 Work Trend Index-which surveyed over 6,000 professionals across eight nations-revealed India exhibited one of the highest burnout rates increases in Asia, with 29% of participants citing heightened stress from job-related pressures (Microsoft News, October 7, 2020).

Additional findings from the report "Hindsight 2020: COVID-19 Concerns into 2021," commissioned by The Workforce Institute at UKG, revealed that over half of Indian employees (55%) were concerned about their organisation's ability to manage workloads and mitigate burnout effectively. Although 72% of both employees and leadership recognised efforts made by their companies to address burnout, more than one-third (36%) highlighted the continued need for leadership that demonstrates greater empathy (Indian Express, November 5, 2020).

The LinkedIn 'Future of Work' perception study conducted by Censuswide in 2023 also shed light on this issue. It revealed that 35% of professionals in India reported experiencing burnout symptoms due to excessive workloads, while another 34% were affected by general work-related stress (CNBC TV18, September 15, 2021). Complementing these findings, a 24% increase in online searches for "signs of burnout"

during 2020 further reflected growing public concern over the issue (The New Indian Express, July 4, 2021).

This phenomenon is particularly relevant in the teaching profession, where burnout not only impacts individual well-being but can also have far-reaching implications on job commitment and retention. As early as the 1980s, Farber (1984) emphasised that teacher burnout had reached a critical level, suggesting that educators might start seeking alternative careers or sources of professional satisfaction (as cited in Al-Omari et al., 2008). More recent studies have echoed this concern, indicating that chronic stress and burnout can prompt faculty members to consider leaving academia altogether (Al-Omari et al., 2008).

Recent surveys and studies highlight a significant prevalence of teacher burnout in India. For instance, a survey conducted by Zamit in 2024 revealed that 55% of Indian teachers experience stress-related challenges, impacting their ability to complete regular tasks efficiently. This alarming trend is driven by high workloads, emotional demands, and limited institutional support. Additionally, a study conducted in Chhattisgarh among 713 primary school teachers found that burnout strongly correlated with both general and emotional job demands (Chakravorty & Singh, 2021). Australia saw a similar pattern, with around 30% of first-year teachers leaving the profession (Goddard et al., 2006).

Studies in the United States estimated that around 5% to 20% of teachers experience job burnout, underscoring the increasing concern within the profession (American University, 2019). The high stress levels experienced by teachers, especially in K-12 education, have been consistently documented, with 44% of K-12 teachers reporting regular feelings of burnout (ThinkImpact, 2025). In a related study in Hong Kong, 45% of school guidance teachers were reported to be experiencing burnout (Lau et al., 2005). The India Today (2019) report highlighted that teachers experience higher levels of stress and burnout than professionals in any other occupation, largely due to workload, emotional demands, and performance pressures. In Australia, research has shown that nearly 30% of novice teachers leave the profession early in their careers due to burnout-related factors (Goddard et al., 2006).

According to a comprehensive scoping review (2022), the prevalence of teacher burnout varies significantly, with rates ranging from 25% to as high as 74%, depending on the region, level of education, and work environment. The National Education Association (NEA) conducted the survey revealing that over 55% of teachers reported significant burnout symptoms in 2022. This survey highlighted the exacerbation of burnout due to increasing demands. The study conducted by the Education Support charity, which found that 72% of teachers in the UK reported feeling stressed and overwhelmed, with 46% considering leaving the profession due to burnout, was part of the Teacher Wellbeing Index 2021. Researchers have shown that 69% of Iranian educators are experiencing burnout on the job.

The National Foundation for Educational Research (NFER) report from the UK (2019) revealed that teachers experience considerably more work-related stress than individuals in many other occupations (Worth & Van den Brande, 2019). The report noted that one in five teachers (20%) experience frequent job-related tension, in contrast to 13% among professionals in comparable roles. Further, a study published in the *Journal of School Psychology* (2020) revealed that only 6% of middle school teachers in the UK experienced low stress alongside strong coping mechanisms. The results showed that almost all teachers surveyed experienced elevated stress levels; most (66%) demonstrated strong coping skills despite this, whereas about 28% reported high stress combined with limited coping capacity.

A study conducted by medical researchers found that students in classrooms led by teachers experiencing higher levels of burnout showed elevated levels of the stress hormone cortisol (India Today, January 9, 2020). Over the past few decades, burnout has received increasing attention in academic literature as researchers have aimed to explore the underlying causes of workplace stress-related disorders. In professions centered around human services-such as teaching-teachers often contend with ongoing pressures and demanding conditions, which can result in chronic stress and eventual burnout (Skaalvik & Skaalvik, 2017). While numerous factors have been linked to burnout in educational contexts, emerging evidence suggests that specific leadership styles may contribute to its occurrence.

Workplace bullying has garnered global recognition as a significant occupational concern, with research conducted across a range of countries-including Scandinavian nations (Einarsen, 1999), the United States (Lutgen-Sandvik, 2008), Greece (Karatza et al., 2017), Australia (Hutchinson, 2014), and South Korea (Uhm & Yoon, 2016)-consistently highlighting its prevalence and consequences. Organisations around the world acknowledge the serious organisational impacts of bullying, such as increased employee burnout, turnover, and the financial and time costs associated with replacing and retraining staff (Tracy et al., 2006, as cited in Mills et al., 2019).

In recognition of the widespread and damaging effects of ‘workplace bullying’ and harassment, the International Labour Organisation (ILO) adopted ‘Convention No. 190 on Violence and Harassment in the World of Work’ on June 21, 2019. Recent data (2024) has shown that 30% of American workers have reported experiencing bullying in the workplace (Adviser Society, 2024). Furthermore, global prevalence studies suggested that approximately 15% of employees experience workplace bullying, with variation across cultures and job sectors (Leon-Perez et al., 2021).

Findings from the November 2022 report titled "Experiences of Violence and Harassment at Work: A Global First Survey", jointly published by the ‘International Labour Organisation (ILO)’, ‘Lloyd’s Register Foundation’, and ‘Gallup’, revealed that slightly over 22% of nearly 75,000 respondents across 121 countries and territories had experienced some form of violence or harassment in the workplace. The report emphasised that “violence and harassment in the world of work is a pervasive and harmful phenomenon, with profound and costly effects ranging from severe physical and mental health consequences to lost earnings and destroyed career paths to economic losses for workplaces and societies.” Notably, more than 60% of those who reported experiencing such incidents stated that it had occurred multiple times, with the most recent incident taking place within the past five years for the majority of victims. These findings underscore the widespread nature and enduring impact of workplace violence and harassment on individuals and organisational systems.

Research into global patterns of ‘workplace bullying, emotional abuse, and harassment’ reports incidence rates ranging between 4.1% and 51.0%, as documented

by Jose-Maria Leon Perez (2021) and colleagues in the 'Handbooks of Workplace Bullying, Emotional Abuse, and Harassment (Volume 1).' A study by Unison (2013), one of the largest trade unions in the United Kingdom, found that workplace bullying can have devastating consequences for victims, often triggering existential crises as individuals struggle to comprehend their experiences. Bill Sutton (2007, as cited in Poddar, 2020) reported that the presence of bullies in the workplace could reduce productivity by up to 40%. Additionally, research from noworkplacebullies.com indicated that approximately 30% of employees subjected to harassment and 20% of witnesses are likely to leave their jobs (India Today, December 22, 2020). Further, in a Forbes article, Walker (2024) noted that bullying could result in significant psychological distress and exhaustion, sometimes pushing victims toward extreme responses, irrespective of the underlying reasons for the bullying.

In their ground breaking empirical studies on 'workplace bullying' in India, D'Cruz and Rayner (2013) sought to understand whether bullying was prevalent in the ITES-BPO industry in India. Workplace bullies do occur in India, according to D'Cruz (2013), who wrote the book "Workplace Bullying in India," but there is limited data that makes it hard to gauge how widespread the problem is. Researchers have looked at the frequency of bullying in the workplace in a variety of fields outside of ITES-BPO, such as banking (Gupta, 2013), higher education (Gupta, 2013), information technology (IT) (Ciby & Raya, 2014), and the medical field (Bairy et al., 2007) (as cited in Gupta, R., 2017). Nearly 55% of Indian professionals have experienced workplace bullying, according to a survey by Careerbuilder.in (2020).

Several well-known internet media have covered the disturbing topic of bullying in the workplace among Indian employees. Publications such as 'The Times of India,' 'The Hindu,' and 'The Indian Express' have included workplace bullying pieces that delve into the prevalence and characteristics of workplace animosity in India. Indian Hindi films like Rocket Singh and, to a lesser degree, Kartik Calling Kartik have brought attention to the issue of 'bullying' in the workplace (Gupta et al., 2017). According to Global Indian Network (The Rules of Leadership Hiring, 2024), 55% of Indian employees experience bullying at work, while a survey by Monster.com (2023) suggested that 94% have been indirect witnesses to instances of harassment at the workplace.

The preceding discussion underscored the Indian context as an important area warranting focused investigation, especially regarding the link between ‘leadership styles’ and ‘burnout,’ along with the effects of ‘workplace bullying’ and ‘psychological empowerment’ in educational institutions.

Schools function as dynamic environments where multiple factors, including the ‘leadership style’ of the principal, can contribute to ‘teacher burnout.’ Although this relationship has been the focus of numerous international studies, limited research has explored how principals’ leadership styles influence teacher burnout within the Indian education system. Specifically, limited insight exists into how various leadership styles contribute to differences in teacher burnout levels. Moreover, limited attention has been given to how different leadership approaches can help reduce burnout. In India, only a few studies have explored this topic comprehensively, examining the multiple dimensions of both leadership and burnout.

Among workplace stressors, ‘workplace bullying’ is considered one of the most intense and widespread, often reported to occur more frequently than even sexual harassment (Giorgi et al., 2016; Namie, 2003, as cited in Gupta et al., 2017). Despite its global recognition as a significant workplace issue (Einarsen et al., 2009), scholarly research on ‘workplace bullying’ in the Indian context remains limited. Despite growing awareness, systematic data detailing its nature and patterns, frequency, and severity, especially in the educational sector remains scarce. While bullying in the workplace has been examined across various professions, teachers in India have received comparatively little attention in this regard.

Additionally, literature exploring the link between ‘workplace bullying’ in educational settings and ‘burnout’ is scarce. A review of existing studies indicates that very few investigations have focused on the relationship between ‘workplace bullying’ and ‘burnout’ among Indian teachers. This suggests a significant gap in academic research that needs to be addressed to understand how these two factors interact and affect the teaching profession in India.

Given that ‘leadership’ is a key factor influencing ‘workplace bullying,’ several studies have explored the impact of various leadership styles on workplace bullying behaviours. However, no research was identified that specifically examines the

relationship between different ‘leadership styles,’ ‘workplace bullying,’ and ‘burnout’ within the Indian educational context.

In recent times, educational research has shown an increasing focus on the concept of psychological empowerment. Scholars have explored various factors that influence teachers' sense of empowerment, including the leadership styles of school principals (Moye et al., 2004). Other investigations have focused on the organisational and individual factors that precede and result from teacher empowerment (Somech, 2005; Zembylas & Papanastasiou, 2005). However, limited research has explored how various leadership styles, together with workplace bullying, interact to influence teachers’ psychological empowerment, especially within the context of the Indian education system. This study sought to address this gap by exploring the moderating role of ‘psychological empowerment’ in the relationship between school ‘leadership styles’ and ‘workplace bullying’.

Although leadership practices of school principals are often regarded as contributing factors to teacher burnout and workplace bullying, empirical research exploring this connection within the Indian context remains scarce. The current study aimed to contribute to this underexplored area by examining the relationship between ‘perceived leadership styles’ and ‘burnout’ among school teachers, while also considering the influence of ‘workplace bullying’ and ‘psychological empowerment’.

Among occupational groups, teachers are particularly vulnerable to job burnout, and one of the key contributors to rising burnout levels has been identified as the leadership approach adopted by school principals. Burnout affects not only teachers personally but also extends its impact to students’ learning, the functioning of educational institutions, and the overall education system. Considering the vital contribution of education to national growth, addressing and reducing teacher burnout is crucial for ensuring long-term social and economic development.

This research holds practical value for school administrators and policy-makers, as it can assist in evaluating the prevalence of burnout across India’s educational sector and in developing strategies to address it. This research adds to the existing literature

by examining the impact of ‘principals’ leadership styles’ on ‘teacher burnout’ while incorporating the aspects of ‘workplace bullying’ and ‘psychological empowerment.’ Insights derived from this study may offer a clearer understanding of the factors that contribute to or help prevent burnout among teachers, thereby providing meaningful direction for future interventions and research in school settings.

The study would have the potential to provide meaningful implications for teachers, educational administrators, and policy stakeholders. The findings would assist school leaders in recognizing their influence in reducing burnout among teachers. School leaders need to understand how significantly their roles and behaviours affect the levels of burnout among teachers. Additionally, the study would contribute towards the need for the development of academic leadership education and leadership training in educational institutes, as well as to devise methods to promote work well-being.

This study was expected to offer valuable insights for educational stakeholders, aiding in the identification of underlying causes of workplace bullying within school environments. It also sought to explore the potential mitigating role of ‘psychological empowerment’ and contribute to formulation of administrative, policy-based, legislative responses to combat ‘workplace bullying.’ Moreover, the outcomes of this research could lead to broader improvements in organisational well-being by reducing the negative impacts of bullying on both teachers and educational institutions. By expanding existing research on workplace bullying, the study also aimed to deepen understanding of how ‘leadership styles’ can significantly contribute to managing and reducing this problem within schools.

To effectively counter workplace bullying and enhance school climate, it is essential to design targeted training, preventive strategies, and leadership development programmes. The findings from this study can inform employers, educators, policymakers, and mental health professionals, encouraging them to implement practical interventions and shape more responsive public policies. Increased awareness through such research can promote the adoption of best practices and contribute to a more supportive and inclusive work culture in educational settings.

The study also aimed to fill an existing research gap by examining teacher burnout in India through the combined lenses of ‘leadership styles,’ ‘workplace bullying,’ and ‘psychological empowerment’. The study may emphasise the role of school leadership in creating a positive and respectful work environment that reduces the likelihood of bullying and burnout. The results could further lay the groundwork for developing and testing intervention strategies aimed at supporting teacher well-being.

Although a substantial volume of research has been devoted to identifying factors associated with burnout, much of it has not comprehensively addressed the interplay of ‘workplace bullying’ and ‘leadership style’ in the Indian educational context. Past studies have often explored stress levels among teachers, affirming that many experience burnout due to occupational pressures. Some research has also considered how demographic variables such as ‘age,’ ‘gender,’ ‘marital status’ relate to burnout, but a more holistic, multidimensional investigation remains necessary-an objective this study seeks to fulfil.

Research findings on burnout among teachers have been mixed. Fisher (2011) reported that younger teachers exhibited higher levels of ‘emotional exhaustion’ and ‘depersonalisation’ compared to their older counterparts. However, other studies, such as Mousavy (2012), indicated that older teachers experienced greater burnout, while some findings presented the reverse pattern. Regarding gender differences, previous research has suggested that gender is not a consistent predictor of job burnout. Some studies observed that women scored higher in emotional exhaustion, whereas men showed higher levels of pessimism. Additionally, Bayani (2013) found no significant association between demographic factors and burnout levels. Thus, despite growing recognition of the complexities surrounding teacher burnout, much remains to be understood-particularly within the unique socio-cultural and institutional contexts of India.

Hence, due to paucity of research in examining the role of ‘perceived leadership styles’ in teacher ‘burnout’, the role of ‘workplace bullying’, and the moderating influence of ‘psychological empowerment’ in Indian schools, along with inconsistencies in research findings, and the urgent need for ensuring teacher well-being for improving academic achievement and promoting the holistic development of

students, inspired the investigator to undertake the present study to examine whether ‘perceived leadership styles’ of principals affect ‘burnout’ among secondary school teachers through ‘workplace bullying’ and ‘psychological empowerment’. The study tried to fill these critical research gaps and contribute meaningfully to the enhancement of educational quality and teacher well-being, which are indispensable for students’ academic achievement and holistic development and subsequently national development.

1.8 Statement of the Problem

The problem was stated as:

“PERCEIVED LEADERSHIP STYLES OF PRINCIPALS AND BURNOUT AMONG SECONDARY SCHOOL TEACHERS OF ASSAM: ROLE OF WORKPLACE BULLYING AND PSYCHOLOGICAL EMPOWERMENT”

1.9 Operational Definition

Perceived Leadership Styles: Refers to secondary school teachers’ perception of the behavioural pattern of the principals and measured through “Teachers’ Perception of Their School Principal Leadership Style Questionnaire (Uri Even & Iris Ben David-Hadar, 2021).” In the current study, the ‘perceived leadership styles’ include “transformational leadership, transactional leadership, and laissez-faire leadership styles.”

Burnout: Refers to a psychological syndrome involving attribution of exhaustion to three specific domains in the person's life-that is overall exhaustion, exhaustion linked to one’s work, and exhaustion associated with interactions involving clients.

‘Personal burnout’ is “the degree of physical and psychological fatigue and exhaustion experienced by the person.”

‘Work-related burnout’ is defined as “the degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work.”

‘Client-related burnout’ is “the degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work with clients.” “Clients” broadly encompasses individuals such as ‘patients,’ ‘inmates,’ ‘children,’ ‘students,’ ‘residents,’ etc. In this study, the subscales of burnout were measured through “Copenhagen Burnout Inventory (Kristensen et al., 2005).”

Workplace Bullying: Refers to “harassing, offending, socially excluding someone, or negatively affecting someone’s work. For the label bullying to be applied to a particular activity, interaction or process, it must occur repeatedly and regularly (e.g. weekly) and over a period (e.g. about six months) (Einarsen et al., 2003)”. In this study, Workplace Bullying was measured through the “Negative Acts Questionnaire-Revised (NAQ-R) (Einarsen & Raknes, 1997; Revised 2009)”, which comprises three dimensions: ‘work-related bullying,’ ‘person-related bullying,’ and ‘physically intimidating bullying’.

Psychological Empowerment: It is conceptualised as an intrinsic motivation manifested in four cognitions reflecting an individual’s orientation to his or her work role. The four cognitions are “meaning, competence, self-determination, and impact” (Spreitzer, 1995). ‘Psychological Empowerment’ was measured through “Psychological Empowerment Scale (PES-1995)” which was developed by Spreitzer.

Secondary School Teachers: Refers to the teachers teaching classes (9-10) and having a qualification of graduation with B.Ed., working in government and private schools of Assam affiliated to/recognised by the ‘Board of Secondary Education, Assam’. For this study, teachers were categorised into three groups based on teaching experience: ‘less than 5 years,’ ‘5-10 years,’ and ‘10 years and above.’

Further, based on the latest recommendations by Gonsalves (2021), the operational definitions of all the variables in the present study have been systematically structured and presented in Table 1.1 below.

Table 1.1. Operational definitions of Variables as per Gonsalves (2021)

Variables	Conceptual Definition	Operational Definition	Dimensions	Indicators	Measurement Scale
Perceived Leadership Styles	Teachers' perception of their principal's behavioural patterns.	Teachers' perception of their school principal leadership style questionnaire consisting of 11 items.	Transformational Transactional Laissez-faire	Collaboration, Support, Rewards, Passive Management	Ordinal (Likert Scale)
Burnout	A psychological syndrome involving general, work-related, and client-related exhaustion.	Copenhagen Burnout Inventory' made up of 19 items.	Personal Burnout Work-related Burnout Client-related Burnout	Fatigue, Exhaustion Job-related stress Student-related stress	Ordinal (Likert Scale)
Workplace Bullying	Persistent exposure to negative acts such as harassment, social exclusion, or work obstruction.	Negative Acts Questionnaire -Revised (NAQ-R) consisting of 23 items.	Person-related Work-related Physically Intimidating	Verbal abuse, social isolation, Task-related pressures Threatening gesture. aggression	Ordinal (Likert Scale)
Psychological Empowerment	Intrinsic motivation reflecting a person's orientation to their work role.	Psychological Empowerment Scale made up of 12 items.	Meaning Competence Self-determination Impact	Purpose, Confidence Autonomy Influence	Ordinal (Likert Scale)
Secondary School Teachers	Teachers teaching classes 9–10 in schools affiliated to/recognised by SEBA, Assam.	Teachers with qualifications of graduation and B.Ed., grouped by years of experience.	Teaching Experience	Less than 5 years, 5–10 years, more than 10 years	Categorical

1.10 Objectives

The objectives of the study were as follows:

1. To explore the leadership styles of principals as perceived by secondary school teachers.
2. To explore the levels of burnout and psychological empowerment among secondary school teachers.
3. To find out the frequency and forms of workplace bullying among secondary school teachers.
4. To compare the perceived leadership styles of principals, level of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment among teachers with respect to gender, type of school, experience, and locality.
5. To find out the relationship of perceived leadership styles of principals (transformational, transactional, and laissez-faire) with burnout, workplace bullying and psychological empowerment among secondary school teachers.
6. To find out the relationship of psychological empowerment with workplace bullying among secondary school teachers.
7. To find out the relationship between workplace bullying and burnout among secondary school teachers.
8. To investigate the mediating role of workplace bullying on the relationship between perceived leadership styles of principals (transformational, transactional and laissez-faire) and burnout.
9. To investigate whether psychological empowerment would moderate the direct and indirect relationship between perceived leadership styles (transformational, transactional and laissez-faire) and burnout via workplace bullying.

1.11 Hypotheses

The hypotheses of the study were as follows:

- H₀₁: There exists no significant difference in perceived leadership styles of principals with respect to gender, locality, experience and type of school.
- H₀₂: There exists no significant difference in level of burnout among secondary school teachers with respect to gender, locality, experience and type of school.

H₀₃: There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to gender, locality, experience and type of school.

H₀₄: There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to gender, locality, experience, and type of school.

H₀₅: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- faire) of principals and burnout among secondary school teachers.

H₀₆: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- faire) of principals and workplace bullying.

H₀₇: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- faire) of principals and psychological empowerment.

H₀₈: There exists no significant relationship between psychological empowerment and workplace bullying among secondary school teachers.

H₀₉: There exists no significant relationship between workplace bullying and burnout among secondary school teachers.

H₁₀: There exists no significant mediating effect of workplace bullying in the relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

H₁₁: There exists no significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

H₁₂: There exists no significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

1.12 Delimitations

1. The study was delimited to the secondary schools in Dibrugarh (Tengakhat block) and Tinsukia (Hapjan block) districts of Assam.
2. The study was delimited to secondary schools affiliated to/recognised by the Board of Secondary Education, Assam (SEBA).

CHAPTER-II

REVIEW OF LITERATURE

A thorough review of related literature constitutes a critical initial step in the research process, as it aids in defining the research problem, recognising its significance, and identifying appropriate methods for data collection and study design. The literature review acts as an essential reference point for researchers, offering guidance on suitable data collection instruments and identifying relevant sources of information. Snyder (2019) highlights that the literature review not only consolidates existing research but also reveals gaps that justify the necessity of new investigations. By organizing existing knowledge in a specific field, the review establishes a foundation that demonstrates how the current research adds to the scholarly discourse, highlighting the study's contribution to the ongoing body of work.

A literature review is a written synthesis of journal articles, books, and other resources, typically structured chronologically and thematically, to give historical and contemporary insights on the selected research topic. Koul (2009) asserted that a comprehensive literature review comprises three interrelated steps: selecting sources, locating and evaluating those sources, and drawing significant conclusions regarding existing research and areas requiring more inquiry. The meticulous adherence to these stages often prevents redundant duties and offers the researcher essential insights on the methodologies employed by previous scholars in similar domains. Moreover, a literature review serves as an invaluable foundation for undertaking quantitative research enquiries, as it guides the researcher through prior studies on the pertinent topic. Consequently, examining prior research can be highly beneficial and ought to be conducted prior to the investigator's field data collection. In quantitative research, the investigator begins by reviewing existing literature to justify the significance of the problem and to develop the rationale, research questions, and hypotheses for the study (Koul, 2009).

The literature review allowed the researcher to develop a clearer and more in-depth understanding of previous studies related to the proposed research area. The researcher examined a diverse array of literature, including books, journals, research papers, newspapers, dissertations, theses, educational encyclopaedias, publications,

indexes, directories, bibliographies, technical reports, educational research surveys, and online articles, among other information sources.

This literature review provides an extensive examination of existing studies exploring the relationship between ‘leadership styles’ and ‘teacher burnout,’ particularly emphasising the influence of ‘school principals’ leadership styles’ on either exacerbating or alleviating teacher burnout, while highlighting the impact of ‘workplace bullying’ and ‘psychological empowerment.’ The literature review consolidates findings from multiple studies, examining the theoretical frameworks and empirical evidence that support the intricate relationship between ‘leadership styles’ and ‘teacher burnout.’ This review seeks to critically analyse the existing knowledge on this topic to identify major themes, gaps, and methodological constraints, so establishing a basis for subsequent research and guiding initiatives to promote teacher wellness and reduce burnout in educational environments.

2.1 Studies Related to Perceived Leadership Styles and Burnout

The contemporary educational landscape encounters various obstacles, such as escalating demands, limited resources, and heightened workloads. These elements lead to teacher burnout, a syndrome defined by ‘emotional exhaustion’, ‘depersonalisation’, and ‘diminished personal achievement’ (Maslach & Jackson, 1981). At the same time, the leadership style of school principals significantly influences school culture, teacher morale, and job satisfaction. Of the different leadership styles, transformational leadership has attracted attention for its ability to encourage and energise teachers. The leadership approaches adopted by school principals significantly influence the overall school environment, teacher motivation, and professional outcomes. Over the years, researchers have explored how teachers’ perceptions of principals’ leadership styles vary based on their ‘gender,’ ‘the type of school they work in,’ ‘the locality of the school,’ and ‘their years of teaching experience.’ This section examines the relationship between ‘principals’ leadership styles’ and ‘teacher burnout,’ while also analysing how these relationships differ across teachers’ demographic characteristics such as gender, school type, locality, and teaching experience.

Cevik et al. (2025) conducted a study in Turkey with 362 teachers across primary and secondary schools to examine the impact of empowering leadership on teacher psychological resilience, exploring whether effects differed by gender and

length of time working with the principal and found that empowering leadership was significantly associated with greater resilience, and this relationship was particularly stronger for female teachers and for teachers who had spent longer time working under the same principal.

Sasmiaji et al. (2025) conducted a study in private secondary schools in Bumitama, Indonesia and found that principals who demonstrated transformational leadership-characterised by empowering teachers, promoting creativity, and fostering equitable relationships-played a significant role in reducing teacher burnout. These findings highlighted the importance for leadership styles that focus on empowering teachers, encouraging shared decision-making, and cultivating a supportive school environment to promote teacher well-being and maintain long-term motivation.

Alharthi (2024) found that female faculty members at Taif University exhibited a stronger preference for transformational leadership styles, characterised by inspiration and motivation, whereas male faculty members favoured transactional leadership, which emphasizes structure and rewards.

Garcia (2024) studied the relationship between ‘leadership styles’ and ‘burnout’ in K-12 public school teachers in South Texas and revealed that transformational style was linked to lower levels of burnout, as they fostered a positive work environment and provided emotional support.

Kumari and Goel (2024) observed that principals of private schools were perceived to exhibit more democratic leadership behaviours compared to those in government schools. Their study also identified a significant difference in the prevalence of the ‘laissez-faire leadership style,’ with government school principals being viewed as more laissez-faire than principals of private institutions.

Pandey and Sayed (2024) highlighted the prevalence of ‘burnout’ among Indian teachers and identified factors such as heavy workloads, limited autonomy, and inadequate support as primary contributors to teacher burnout.

Pritchett (2024) examined the relationship between ‘principal leadership styles’ and ‘teacher burnout’ in various elementary, middle, and high schools in Alabama. The findings indicated that while ‘transformational leadership’ was associated with reduced teacher burnout, ‘transactional leadership’ did not show a significant correlation with teacher burnout levels.

In a study conducted in China, Tian and Guo (2024) examined the mechanisms and contextual factors influencing the connection between ‘transformational leadership’ and ‘teacher burnout,’ revealing that ‘transformational leadership’ negatively predicts levels of ‘teacher burnout.’

Patterson (2024) examined differences in commitment levels between rural and non-rural teachers and how principals' transformational leadership behaviours influence these levels. The study revealed that teachers in rural areas demonstrated stronger commitment when their principals displayed transformational leadership practices. This suggests a stronger appreciation for transformational leadership styles in rural settings. However, the study did not compare these findings to urban teachers' perceptions or experiences with transactional leadership.

Watson (2024) carried out a mixed-methods investigation on the impact of ‘transformational leadership’ on ‘teacher burnout’ among PreK–12 educators in the United States and found a significant negative association between ‘transformational leadership’ and each dimension of ‘burnout.’

Barbosa and Coneway (2023) found that principals in rural areas commonly employed a combination of transformational and transactional leadership approaches to foster supportive school climates, which in turn led teachers in these settings to view transformational leadership more favourably. In contrast, urban teachers encountered more structured and performance-based approaches, contributing to higher perceptions of transactional and laissez-faire leadership.

De La Rosa (2023) found no statistically significant relationship between principals’ ‘transformational’ competencies and components of ‘teacher burnout,’ particularly emotional exhaustion, even though teachers perceived their principals as exhibiting strong transformational qualities.

Norbu and Ghalay (2023) conducted a study in Tsirang Dzongkhag, finding that laissez-faire leadership was positively associated with emotional exhaustion and teachers' motivation to leave the profession.

Tsang et al. (2022) investigated the correlation between ‘teacher burnout,’ ‘transformational leadership,’ and ‘psychological empowerment’ among primary and secondary school teachers in China and indicated that transformational leadership was a negative predictor of teacher burnout.

Palomo (2021) examined the correlation between the 'leadership style' of principals, as perceived by teachers, and 'teacher burnout,' finding that principals employing 'transformational and transactional leadership styles' fostered lower levels of 'emotional exhaustion' and 'depersonalisation'.

Berkovich & Eyal (2020) investigated how different leadership styles-'transformational,' 'instructional,' and 'transactional'-affect teacher burnout and found that transformational and instructional leadership styles were most effective in reducing burnout.

Genc (2020) investigated the link between teachers' perceptions of ethical leadership and their levels of 'burnout' and found a significant negative association between 'ethical leadership' and 'emotional exhaustion.'

Ilyavi (2019) examined the relationship between 'perceived leadership style' and teachers' 'emotional exhaustion,' 'depersonalisation,' and feeling of reduced 'personal accomplishment' among teachers and found significant correlations between certain principal 'leadership styles' and the three components of 'teacher burnout.'

Kelly & MacDonald (2019) investigated leadership styles in relation to solidarity communication and found that authoritarian leadership was associated with the lowest solidarity, least job satisfaction, and highest burnout.

Hildenbrand et al. (2018) studied 'transformational leadership and burnout,' concluding that 'transformational leadership' serves as a resource that protects employees from burnout.

Shaked et al. (2018), in their research on instructional leadership among school principals, reported no substantial differences between male and female leaders. The study proposed that contextual elements-such as school culture, leadership tenure, and organisational structure-may have a greater influence on leadership behaviour than gender alone. Silva and Mendis (2017) examined leadership styles across male and female leaders and reported that women scored higher on transformational leadership dimensions. Conversely, men were found to score higher on transactional and laissez-faire leadership styles. These results underscore gender-related differences in leadership execution and reinforce the notion that female leaders tend to be more people-oriented and collaborative, while male leaders may adopt more hierarchical and performance-driven approaches.

Niessen et al. (2017) reported that school leaders' transformational leadership behaviours were linked to a decrease in thriving when teachers' emotional exhaustion levels were moderate, while transformational leadership boosted thriving when emotional exhaustion levels were very low.

Skaalvik & Skaalvik (2017) linked teacher stress and burnout to leadership styles, emphasising the role of emotional and professional support from principals. Strong support from supervisors correlated with lower stress and higher job satisfaction.

Eslamieh and Davoudi (2016) analysed the relationship between managers' ethical leadership style, teachers' organisational commitment, and job burnout, and found a negative relationship between ethical leadership and burnout.

Arnold et al. (2015) assessed 'leadership styles,' 'emotional regulation,' and 'burnout,' revealing that 'transformational leadership' and 'laissez-faire leadership' influenced 'burnout' through the channel of genuine feeling.

Al-Shudaifat (2015) examined the 'leadership styles of principals' and their association with 'burnout' among Islamic studies teachers in the Mafraq education district. The findings revealed no significant differences in teachers' perceptions of 'principals' leadership styles' across different teaching disciplines, nor were there differences in 'burnout' levels based on teachers' 'years of experience' or 'the type of school.'

Kilinc (2014) found that teachers in private schools were more likely to perceive transformational leadership behaviours from their principals. This leadership style may be more prevalent in private institutions due to the competitive environment, where principals emphasize collaboration, innovation, and support to achieve high academic standards.

Gumus and Akcaoglu (2013) indicated that leadership in government schools tends to be perceived as more transactional, with principals focusing on maintaining discipline, adhering to regulations, and achieving standardized academic outcomes.

Eyal and Roth (2011) reported that transformational leadership substantially reduced teacher burnout levels while enhancing teachers' intrinsic motivation.

Thoonen et al. (2011) explored how transformational leadership affects teacher motivation, engagement, and burnout, finding that transformational leaders encouraged reflective practices and innovation.

Barnett (2010) examined 'teachers' perceptions of their principals' leadership styles' and the effects on job satisfaction and teacher retention. The study considered variables such as 'gender,' 'age,' and 'experience,' finding that these factors influenced teachers' perceptions and job satisfaction levels. This indicates that demographic variables can moderate the relationship between 'leadership style' and 'teacher burnout.'

Grayson and Alvarez (2008) studied the correlation between 'teacher burnout' and 'principal leadership styles' and suggested that principal leadership styles significantly influenced teacher burnout, with supportive leadership and a positive school climate serving as protective factors.

Hoy and Miskel (2008) proposed that transactional leadership might have appealed more to mid-career teachers. These teachers, having already established their professional footing, tended to prefer structured leadership that focused on clear goals, task completion, and performance-based rewards. The transactional approach, which revolved around formal exchanges and accountability, appeared to resonate better with individuals focused on professional advancement and operational efficiency.

Judge and Piccolo (2004) indicated that laissez-faire leadership was generally perceived negatively across all experience levels. Their meta-analysis revealed that this passive and avoidant style was associated with low satisfaction and perceived effectiveness among subordinates. Moreover, dissatisfaction related to laissez-faire leadership increased with experience, likely because more experienced teachers held higher expectations for active, competent, and responsive leadership.

Eagly et al. (2003) reported that female leaders tend to demonstrate stronger transformational leadership behaviours, which aligns with the higher levels of transformational leadership perceived among female teachers.

Over the years, substantial research has demonstrated a strong association between 'principal leadership styles' and 'teacher burnout' across diverse educational contexts. 'Transformational leadership' has consistently emerged as a key protective factor, with studies highlighting its negative correlation with teacher burnout by fostering emotionally supportive, motivating, and collaborative work environments (Sasmiaji et al. 2025, Garcia, 2024; Tian & Guo, 2024; Tsang et al., 2022; Watson, 2024). Teachers under transformational leaders reported lower emotional exhaustion

and greater personal accomplishment, as such leadership styles enhance psychological empowerment and engagement (Tian et al., 2022; Hildenbrand et al., 2018). In contrast, research has shown that 'laissez-faire leadership' is linked to higher levels of burnout, frequently resulting in emotional fatigue and a greater likelihood of leaving the profession (Norbu & Ghalay, 2023). Transactional leadership, while effective in maintaining discipline, showed mixed results-some studies indicated it was unrelated to burnout (Pritchett, 2024), while others noted its limited protective role (Palomo, 2021). Furthermore, authoritarian leadership styles were associated with low job satisfaction and high burnout, highlighting the detrimental effects of unsupportive leadership (Kelly & MacDonald, 2019). Despite isolated findings to the contrary (e.g., De La Rosa, 2023), the broader literature strongly supports the view that empowering and ethically grounded leadership significantly reduces 'burnout' among teachers (Berkovich & Eyal, 2020; Eslamieh & Davoudi, 2016; Grayson & Alvarez, 2008). This body of work reinforces the crucial role of leadership in promoting teacher well-being, especially in the face of increasing professional demands and challenges.

The literature on perceived leadership styles of school principals reveals mixed findings in relation to demographic variables such as 'gender,' 'type of school,' 'locality,' and 'experience of teachers.' Studies indicated that female teachers (Alharthi, 2024; Eagly et al., 2003) tended to perceive principals more favourably when they exhibited transformational leadership behaviours, while male teachers more commonly aligned with transactional leadership preferences. Rural teachers (Patterson, 2024) reported higher levels of commitment under transformational principals, suggesting a preference for supportive leadership in close-knit community settings. Teachers in private schools (Kilinc, 2014) perceived their principals as more transformational, likely due to the competitive and performance-driven culture, whereas government school teachers (Gumus & Akcaoglu, 2013) were more likely to perceive transactional leadership, marked by a focus on discipline and regulation. Younger and less experienced teachers (Marshall, 2015; Barnett, 2010) were more vulnerable to stress and burnout, which was linked to perceptions of unsupportive or authoritarian leadership. However, some studies (Al-Shudaifat, 2015) found no significant differences in perceptions of leadership based on experience or school type. Overall,

the findings underscored the multifaceted nature of leadership perceptions among teachers, shaped by a complex interplay of demographic and institutional contexts.

Burnout among teachers is an established phenomenon that has been explored through various perspectives, including gender, type of school, locality, and years of experience.

Kollerova et al. (2023) found that ‘workplace bullying’ was positively associated with ‘teacher exhaustion.’ Female and less experienced teachers reported higher levels of exhaustion, emphasising the need for supportive leadership and interventions to address student behaviour.

Bottiani et al. (2019) found that urban middle school teachers face high job demands and low resources, contributing to elevated stress and burnout levels. Teachers with ‘fewer than 10 years of experience’ are more susceptible to burnout, especially in urban schools where classroom management challenges are prevalent.

Purvanova and Muros (2010) conducted a comprehensive meta-analysis to examine gender differences in burnout and revealed that female teachers reported higher levels of emotional exhaustion, while male teachers exhibited greater depersonalisation. The results suggested that women were more susceptible to emotional fatigue, whereas men tended to develop a detached attitude towards their work.

Klassen & Chiu (2010) explored burnout in teachers, focusing on gender, experience, and school type, and found that female teachers in private urban schools reported higher burnout levels, particularly emotional exhaustion, compared to their counterparts in government schools. Teachers with less experience (under five years) in both sectors experienced more burnout than their experienced counterparts, with a significant effect in private schools due to increased pressure for student performance.

Demirel et al. (2005) examined burnout among teachers in Turkish schools, focusing on gender, experience, type, and locality of school. Female teachers, particularly those in urban private secondary schools, were more likely to report burnout. Government school teachers, while also experiencing burnout, benefited from more structured environments, though they still reported high levels of emotional exhaustion due to bureaucratic demands. Less experienced teachers also reported higher burnout levels.

The above assemblage of review of literature yielded varied findings on teacher burnout in relation to ‘gender,’ ‘type of school,’ ‘locality,’ and ‘experience.’ Studies revealed that female teachers, particularly those working in urban private secondary schools, reported higher levels of burnout-most notably emotional exhaustion-than their male counterparts (Klassen & Chiu, 2010; Demirel et al., 2005). Less experienced teachers, especially those with under five years of experience, were also found to be more vulnerable to burnout due to limited coping resources and increased performance pressure (Kollerova et al., 2023; Bottiani et al., 2019). Urban school environments, regardless of school type, were consistently associated with higher burnout levels owing to heightened academic expectations, student behaviour challenges, and reduced institutional support (Bottiani et al., 2019). In contrast, more experienced teachers and those working in government or rural schools often faced structured demands and smaller class sizes, which somewhat mitigated burnout symptoms. Collectively, the findings emphasize that urban settings, lesser experience, and female gender are significant risk factors for burnout among teachers.

2.2 Studies Related to Perceived Leadership Styles and Workplace Bullying

The association between school principals’ ‘perceived leadership styles’ and teachers’ experiences of ‘workplace bullying’ has become an increasingly important area of investigation in educational research. Workplace bullying has profound implications for teachers’ psychological and emotional well-being, often resulting in heightened stress, reduced job satisfaction, and an increased risk of burnout. As key figures in establishing school climate, principals significantly influence whether bullying behaviours are discouraged or perpetuated. Studies on workplace bullying within educational settings have also increasingly examined its effects on teachers, considering factors such as ‘gender,’ ‘type of school,’ ‘locality,’ and ‘teaching experience.’ This section presents a comprehensive review of empirical studies that have investigated the relationship between principals’ perceived leadership styles and workplace bullying among teachers, while also highlighting how these dynamics vary across different demographic groups such as gender, school type, locality, and years of teaching experience.

Wang (2026) explored the emergence and persistence of workplace bullying among teachers in Chinese private universities and indicated that workplace bullying

was closely linked to organisational structures and leadership practices rather than being merely interpersonal conflict and found that controlling and authoritarian leadership practices increased teachers' vulnerability to bullying, whereas supportive and participative leadership helped to foster a healthier organisational climate and reduce bullying incidents.

Ergen et al. (2025) conducted a relational study with 411 public school teachers in Turkey to examine whether mobbing (workplace bullying) mediates the relationship between 'perceived principal leadership style' and 'teacher disengagement' or "quiet quitting." The results indicated that autocratic leadership had a direct positive association with mobbing and teacher withdrawal, whereas democratic leadership showed a negative relationship with both outcomes. Mobbing acted as a partial mediator, suggesting that autocratic leadership fosters harmful work dynamics that lead to disengagement, while democratic styles help prevent them.

Garcia (2024) examined the impact of 'workplace bullying' on teacher performance, comparing public and private sectors and concluded that private school teachers experienced higher levels of bullying. In government schools, while bullying still existed, structured grievance systems helped mitigate its effects, providing teachers with avenues for support and redress.

Orunbon and Ibikunle (2023) investigated workplace bullying in Nigerian public and private senior secondary schools and found that toxic leadership in private schools contributed significantly to bullying, with teachers reporting feeling isolated and mistreated. Government school teachers faced bullying as well, particularly in cases where leadership was ineffective or autocratic, but the prevalence was less compared to private institutions.

Cao et al. (2023) conducted a large-scale meta-analysis to examine links between various leadership types and workplace aggression including bullying and found that ethical, transformational, relational, and moral leadership styles consistently correlated with lower aggression, while passive, laissez-faire, and destructive leadership were associated with higher levels of workplace bullying.

Yadav et al., (2020) explored the impact of 'workplace bullying' on 'turnover intention' among Indian school teachers and identified that unmarried male teachers experienced higher levels of 'bullying' compared to their female colleagues.

Rastegar et al. (2019) examined the relationship between transformational leadership style and workplace bullying and found that components of transformational leadership exerted an indirect and negative influence on bullying at work. Among these components, idealized influence demonstrated the strongest indirect impact in reducing incidents of workplace bullying.

Cemaloglu (2017) focussed on the role of 'leadership styles' in 'workplace bullying' and found that schools with democratic or transformational leaders experienced fewer bullying incidents. In contrast, principals with autocratic leadership styles were more likely to ignore or contribute to bullying.

Sinha and Yadav (2017) conducted a qualitative study involving senior secondary teachers in India to explore perceptions of workplace bullying and revealed that teachers often perceive workplace bullying as prolonged acts of humiliation and excessive monitoring by superiors, which are used to exhibit power and establish dominance over employees and highlighted the significant role of leadership behaviour in contributing to workplace bullying in educational settings.

In a study on German schools, Pietsch and Tulowitzki (2017) assessed the relationship between 'workplace bullying' and teacher demographics. The study found that gender and experience were key factors in determining the likelihood of bullying. Female teachers with fewer years of experience were more vulnerable, particularly in competitive urban schools where the pressure to meet academic targets was higher.

De Vos & Kirsten (2015) deliberated on teacher bullying in South African schools along with possible repercussions on teachers' biopsychosocial health and found principals as the most common perpetrators of bullying.

De Wet (2014) examined workplace bullying among South African teachers, noting that leadership styles played a critical role in bullying dynamics. The study found that teachers who perceived their principals as authoritarian or unsupportive were more likely to experience bullying. It was emphasised that bullying was not limited to teacher-to-teacher interactions but often involved hierarchical bullying from administrators.

Cerit (2013) explored the relationship between paternalistic leadership and bullying behaviours, finding a significant negative association between paternalistic leadership and various forms of workplace mistreatment, including work-related

criticism, social isolation, non-work-related criticism, and attacks targeting attitudes and ethnicity.

Salin & Hoel (2013) looked at workplace bullying in educational institutions across several countries and confirmed that female teachers, particularly in urban and high-pressure environments such as secondary schools, experienced bullying more frequently. It also emphasised that less experienced teachers were more prone to bullying, especially in competitive or high-achieving schools where expectations were higher.

Cemaloglu (2011) conducted a study examining 'principals' leadership styles,' 'school organisational health,' and 'workplace bullying' among teachers. The findings indicated a positive association between principals' 'transformational leadership' behaviours and the organisational health of schools, along with a negative association between 'transformational leadership' and 'workplace bullying.' The study further observed that as principals demonstrated stronger transformational leadership behaviours, instances of workplace bullying against teachers declined.

Cemaloglu (2011) studied the relationship between workplace bullying, locality, and teacher experience and found that teachers in urban schools were more likely to experience bullying than those in rural schools. Additionally, less experienced teachers were more vulnerable to bullying.

Riley, et al. (2011) conducted a study in Australian schools, examining the relationship between 'workplace bullying' and teacher demographics and found that gender was a significant factor, with female teachers experiencing more bullying than males, particularly in rural schools. Rural schools, due to their isolation and smaller size, often lacked the resources and administrative oversight to effectively address bullying, making female teachers more vulnerable.

De Wet (2010) found that female teachers were more likely to experience 'workplace bullying' than their male counterparts. This study also highlighted the differences in bullying prevalence based on the type of school, with teachers in secondary schools reporting higher rates of bullying than those in primary schools.

Riley, et al. (2011) focussed on the effects of 'perceived leadership styles' on 'workplace bullying' in elementary and secondary schools. Teachers who worked under

transformational leaders reported lower incidences of bullying whereas schools with laissez-faire leadership saw higher rates of bullying.

Hoel et al. (2010) found that both observed and self-reported incidents of 'bullying' were associated with 'autocratic' and 'laissez-faire leadership styles.' Autocratic leadership emerged as the strongest predictor of observed bullying, while laissez-faire leadership was identified as a predictor of both self-reported and observed bullying cases.

Einarsen, et al. (2007) explored how different 'leadership styles' influenced workplace bullying in various industries, including education. The study found that 'authoritarian leadership styles' were strongly associated with higher levels of 'workplace bullying' whereas transformational leaders were seen as protective factors against bullying.

In a seminal study on educational leadership and teacher mistreatment, Blase & Blase (2002) highlighted the prevalence of 'workplace bullying' in schools. It was found that teachers often reported feeling bullied by principals who adopted autocratic, unsupportive, or punitive leadership styles. These leadership behaviours created environments where bullying became institutionalized.

Einarsen's (2000) study extended the discussion of bullying to educational settings, introducing the idea that leadership behaviours could either protect teachers from bullying or enable it. The study emphasised that poor leadership, especially passive or autocratic styles, was a strong predictor of workplace bullying incidents.

Einarsen's (2000) research on 'workplace bullying' in various industries, including schools, discussed how gender could be a significant factor, as women were found to be more vulnerable to workplace bullying, especially in male-dominated environments. The study did not delve deeply into educational contexts, but it set the stage for subsequent studies that focussed more specifically on gendered bullying in schools.

Bullying behaviours were reported in the study documented by Rayner and Hoel (1997). According to the findings, most occurrences included verbal abuse, with physical violence being reported only in a few instances. An authoritarian leadership style typically manifests itself in the form of bullying behaviour on the part of school principals.

The occurrence of workplace bullying has been well-documented in the reviewed studies, highlighting its prevalence in educational settings. As schools face new challenges, leadership remains a crucial factor in addressing and preventing workplace bullying. Transformational leadership consistently emerged as a protective factor, associated with reduced incidents of bullying due to its emphasis on support, respect, and empowerment (Rastegar et al., 2019; Cemaloglu, 2011, 2017; Riley et al., 2011). Democratic and paternalistic leadership styles also demonstrated negative associations with bullying, indicating their potential to foster inclusive and respectful environments (Cerit, 2013). Conversely, 'toxic,' 'autocratic,' and 'laissez-faire leadership' styles were frequently linked with increased bullying, as they created conditions of excessive control, neglect, or indifference, which enabled negative behaviours to persist unchecked (Orunbon & Ibikunle, 2023; Hoel et al., 2010; Blase & Blase, 2002). Studies from diverse contexts such as India, South Africa, and Europe revealed that authoritarian leadership was often perceived as a major contributor to workplace bullying, with teachers reporting experiences of humiliation, micromanagement, and power imbalances (Sinha & Yadav, 2017; De Vos & Kirsten, 2015; Einarsen et al., 2007). Moreover, hierarchical bullying-where principals acted as the primary perpetrators-was a recurring theme in many findings (De Wet, 2014; Blase & Blase, 2002). While substantial evidence supports the connection between leadership and bullying, the existing literature shows a gap in examining this relationship through the lens of multidimensional leadership styles within teaching environments (Kwan et al., 2016). Bridging this research gap is crucial for designing focused strategies that foster healthier and more secure school environments.

Research examining workplace bullying among teachers has consistently highlighted variations in prevalence and impact based on gender, school type, locality, and teaching experience. Studies reveal that teachers in private schools are more frequently subjected to bullying due to competitive environments, performance pressures, and limited grievance mechanisms, whereas teachers in government schools benefit from comparatively stronger administrative support structures that mitigate such experiences (Garcia, 2024; Orunbon & Ibikunle, 2023; Klassen & Chiu, 2020). Gender emerged as a critical factor, with female teachers-especially those in urban, secondary, or rural isolated schools-reporting higher bullying rates, often linked to power

imbalances and limited institutional protection (Salin & Hoel, 2013; De Wet, 2010; Riley et al., 2011). Less experienced teachers were particularly vulnerable, facing difficulty adjusting to demanding school environments and often lacking support from more established colleagues or leadership (Pietsch & Tulowitzki, 2017; Cemaloglu, 2011). While male teachers were also affected, studies like Yadav et al. (2020) noted heightened bullying among unmarried males in Indian schools. Overall, these findings underscore the need for effective leadership and institutional safeguards to address bullying, especially for teachers in high-pressure contexts or early in their careers (Einarsen, 2000).

2.3 Studies Related to Workplace Bullying and Burnout

Studies have endeavoured to identify the causes of burnout, which is a condition that is detrimental to both individuals and organisations. Bullying in the workplace may serve as one of the precursors to job burnout. This section investigates the correlation between ‘job burnout’ and ‘workplace bullying’ within the educational context.

Berglund et al. (2025) conducted a nationwide cross-sectional survey of 15,080 higher education employees, including academic, administrative, and support staff, across 38 institutions in Sweden and found that even modest exposure to ‘workplace bullying’ was significantly and positively associated with both stress and burnout, after controlling for relevant demographic and institutional factors.

Kollerova et al. (2023) examined the effects of ‘workplace bullying’ and ‘student misbehaviour’ on ‘teacher exhaustion.’ Their study found that both disruptive student behaviours and workplace bullying significantly contributed to burnout, with social support from colleagues serving as a buffer against emotional exhaustion.

Williams (2023) explored the association between ‘workplace bullying’ and ‘burnout’ among higher education employees. The results revealed that the three dimensions of ‘workplace bullying’ had a positive correlation with ‘emotional exhaustion’ and ‘depersonalisation,’ while showing negative correlation with ‘personal accomplishment.’ The study further highlighted that top-down bullying-bullying from supervisors or those in authority-occurred more frequently than lateral or upward bullying. These outcomes suggested that burnout and bullying are pervasive issues in academic settings, potentially affecting individuals across all levels, irrespective of their rank or professional status.

Hussein et al. (2022) explored the interrelationships among ‘workplace bullying,’ ‘burnout,’ ‘job satisfaction,’ ‘coping mechanisms,’ and ‘organisational commitment’ among teachers in Saudi Arabia and Egypt. Their results revealed that bullying had a significant positive correlation with teachers’ burnout levels.

Bernstein (2022) conducted a study on ‘workplace bullying’ among teachers in South African schools and found that teachers often operate under intense pressure, facing heavy workloads and limited access to supportive resources. Such challenging work conditions were found to contribute to heightened stress, frustration, anger, and aggressive behaviour, thereby creating an environment where ‘bullying’ is more likely to occur. The study also reported that the aftermath of bullying frequently involved emotional exhaustion, reduced self-confidence, anxiety, and depressive symptoms among affected teachers.

Inandi et al. (2022) examined the association between mobbing behaviour, feelings of alienation, and burnout among teachers. The study found a significant positive relationship between teachers’ experiences of mobbing and their sense of alienation. Additionally, mobbing behaviours exhibited by school administrators were positively linked to teachers’ burnout levels, with such behaviours emerging as significant predictors across all dimensions of burnout.

Ribeiro (2022) found that ‘emotional exhaustion’ and ‘depersonalisation’ were directly and significantly associated with physical and verbal violence in Portugal.

Jensen (2022) examined whether test-based school policies contributed to increased ‘burnout’ and ‘workplace bullying’ among teachers. The study found that teachers in high-pressure testing environments were more likely to experience ‘burnout’ and ‘bullying,’ particularly in schools with performance-driven cultures.

Leach (2022) provided an autoethnographic account of ‘workplace bullying’ in two educational institutions. The study highlighted the long-term psychological effects of bullying on teachers, including burnout, stress, and a diminished sense of professional identity.

Solomon (2021) investigated workplace bullying within the specific context of South African teachers, analysing its connection to ‘burnout’-particularly “emotional exhaustion, depersonalisation, and reduced personal accomplishment”-through the lens of the ‘Job Demands-Resources (JD-R) model’. The findings demonstrated a notable

link between job-related factors and the occurrence of bullying, and further established that workplace bullying had a significant association with burnout among teachers.

Malik and Bjorkqvist (2019) examined the impact of ‘workplace bullying’ on ‘occupational stress’ among university teachers. Their findings indicated that psychological distress was a key mediator, reinforcing the link between bullying and teacher burnout.

Gupta and Bakhshi (2018) examined the prevalence of ‘workplace bullying’ in the Indian human services sector and its impact on organisational well-being. The study revealed that ‘workplace bullying’ is rampant and is indirectly associated with reduced organisational well-being through increased ‘burnout.’

Sinha and Yadav (2017) found that Indian teachers perceived workplace bullying as involving sustained acts of humiliation and excessive supervision. Their study also highlighted that individuals subjected to bullying often reported experiencing stress, anxiety, and depression.

Pietsch and Tulowitzki (2017) found that teachers who experienced workplace bullying were significantly more likely to experience burnout. The study highlighted the role of school leadership in either mitigating or exacerbating the bullying-burnout relationship. Teachers in schools with supportive leadership were less likely to experience burnout, even if bullying occurred, while those in schools with authoritarian leadership were more likely to experience burnout.

De Wet (2014) found a strong relationship between ‘workplace bullying’ and ‘burnout’ among teachers. Teachers who experienced bullying, particularly from principals, were more likely to report emotional exhaustion and a loss of motivation. The study suggested that the hierarchical nature of schools, where principals hold significant power, often allowed bullying to persist unchecked, contributing to teacher burnout.

Moscicka-Teske et al. (2014) noted that teachers were subjected to workplace bullying. Those who experienced ‘bullying’ and hostile behaviours exhibited more pronounced symptoms of professional ‘burnout,’ including “emotional exhaustion, increased cynicism, and diminished professional efficacy.”

Cemaloglu (2011) explored how different forms of bullying, such as verbal abuse, social isolation, and professional undermining, contributed to teacher burnout

and concluded that bullying led to a loss of professional motivation, increased stress, and eventually burnout. Teachers who experienced frequent bullying reported higher levels of ‘emotional exhaustion and a diminished sense of personal accomplishment.’

Hoel & Cooper (2011) studied ‘workplace bullying’ in the education sector and its long-term psychological effects on teachers. They confirmed that teachers who experienced ‘bullying,’ particularly from administrators, were more likely to suffer from ‘burnout,’ as evidenced by high levels of ‘emotional exhaustion’ and ‘detachment from their work.’

Riley et al. (2011) investigated the prevalence of ‘bullying’ in Australian schools and its impact on teacher well-being. They found that bullying, especially from administrators, was a major predictor of teacher burnout. Teachers who were subjected to verbal abuse, isolation, or micromanagement were more likely to report feelings of exhaustion and detachment from their students, key indicators of burnout.

Cemaloglu (2007) conducted a study on Turkish schools and found a strong correlation between ‘workplace bullying’ and ‘teacher burnout.’ The study demonstrated that teachers who reported being bullied by their colleagues or administrators were significantly more likely to experience ‘emotional exhaustion’ and ‘depersonalisation.’

Blase and Blase (2002) identified a link between principals’ authoritarian leadership styles, workplace bullying, and teacher burnout. Teachers who reported being bullied by their administrators or colleagues exhibited higher levels of emotional exhaustion and were more likely to experience ‘burnout.’

Einarsen (2000) explored the psychological effects of workplace bullying across industries, including education. Einarsen found that individuals subjected to workplace bullying often exhibited symptoms of ‘burnout,’ such as ‘emotional exhaustion and depersonalisation.’

The body of literature examining workplace bullying in educational settings consistently underscored its significant contribution to teacher burnout, with emotional exhaustion and depersonalisation being the most common symptoms. Numerous studies affirmed a strong and positive relationship between bullying-particularly from colleagues and administrators-and increased burnout among teachers (Berglund et al., 2024; Williams, 2023; Bernstein, 2022). Research across diverse contexts such as

Sweden, South Africa, India, and the Middle East highlighted that environments marked by excessive demands, lack of support, and poor leadership facilitated the prevalence of bullying, which in turn heightened psychological strain and diminished job satisfaction (Hussein et al., 2022; Solomon, 2021; Inandi et al., 2022; Gupta & Bakhshi, 2018). Several findings also indicated that social support and ethical school leadership could buffer the effects of bullying, while authoritarian leadership styles tended to escalate burnout outcomes (Pietsch & Tulowitzki, 2017; Hoel & Cooper, 2011; De Wet, 2014). Furthermore, workplace bullying was often exacerbated by high-stakes testing environments and institutional pressures, as seen in studies exploring policy-driven stress and mobbing behaviour (Jensen, 2022; Sinha & Yadav, 2017). Collectively, these studies underscored the need for systemic interventions, including supportive leadership, anti-bullying policies, and organisational reforms, to safeguard teacher well-being and reduce burnout.

2.4 Studies Related to Perceived Leadership Style, Workplace Bullying and Burnout

The relationship among ‘leadership style of school principals,’ ‘workplace bullying,’ and ‘teacher burnout’ has emerged as an expanding focus of research within the educational domain. The leadership style significantly influences school culture and teacher well-being, as ineffective leadership frequently correlates with heightened workplace bullying and increased teacher burnout. This review examines the evolution of literature concerning these three interconnected elements, emphasising significant research and its results.

Onan et al. (2025), in a cross-sectional study of 387 private school teachers, examined how three positive ‘leadership styles,’ transformational, servant, and authentic leadership, affected teacher psychological resilience and ‘burnout’ levels and revealed that all three styles significantly enhanced resilience and reduced ‘burnout.’ Importantly, psychological resilience served as a partial mediator between leadership style and burnout, suggesting that principals who supported teachers’ growth and autonomy could buffer against the emotional strain associated with workplace bullying. Thus, positive leadership indirectly mitigates burnout through strengthening internal resources.

Karakus and Cankaya (2023) explored the effect of ‘workplace bullying’ on ‘teacher burnout’ and found that supportive leadership styles mitigated the effects of ‘bullying’ on ‘burnout,’ highlighting the protective role of positive leadership.

Kollerova et al. (2023) surveyed 740 secondary school teachers to examine how workplace bullying and disruptive student behaviour, alongside leadership support, shaped teacher exhaustion and found that bullying was a key predictor of burnout, accounting for about 11.1% of variance in exhaustion even after adjusting for gender, experience, and school type. Importantly, leadership support mitigated but did not eliminate the impact of bullying. Female and less-experienced teachers reported higher levels of exhaustion, indicating that demographic factors and workplace support both modulate the burnout consequences of bullying.

Bernstein et al., (2022) demonstrated that teachers subjected to workplace bullying experienced higher levels of ‘emotional exhaustion’ and ‘depersonalisation,’ emphasising the detrimental effects of a toxic work environment on teacher well-being.

Gupta and Bakhshi (2018) investigated the relationship between ‘leadership styles’ and ‘workplace bullying’ in Indian educational institutions. The study suggested that authoritarian leadership was positively associated with increased bullying incidents and teacher burnout, whereas transformational leadership helped reduce both bullying and burnout.

Pietsch and Tulowitzki (2017) found that ‘transformational leadership’ reduced the effects of ‘workplace bullying’ on ‘teacher burnout.’ Schools with principals who encouraged collaboration, teacher autonomy, and support had significantly lower rates of bullying and burnout. Conversely, authoritarian or transactional leadership styles led to increased bullying and teacher burnout.

Cemaloglu (2007) reported that teachers working under authoritarian or indifferent leadership experienced higher workplace bullying and burnout. Transformational leadership, which encourages open communication and support, was associated with lower levels of bullying and burnout.

Blase and Blase (2002) found that autocratic or punitive leadership styles fostered workplace bullying, with teachers in these environments reporting higher stress and emotional exhaustion, demonstrating a direct link between leadership style, workplace bullying, and burnout.

The above review reinforced that workplace bullying and teacher burnout are closely linked to the leadership style adopted by school principals. Supportive and transformational leadership-marked by collaboration, empathy, and teacher empowerment-consistently emerged as a protective factor that reduces both bullying and burnout by fostering a positive and respectful school culture (Karakus & Çankaya, 2023; Pietsch & Tulowitzki, 2017). Conversely, authoritarian, indifferent, or punitive leadership styles were repeatedly associated with higher incidences of bullying, which significantly contributed to teacher burnout, particularly ‘emotional exhaustion’ and ‘depersonalisation’ (Bernstein et al., 2022; Gupta & Bakhshi, 2018; Cemaloglu, 2007; Blase & Blase, 2002). These findings underscore the critical role of school leadership in shaping the psychosocial climate of schools and in protecting teachers’ well-being.

2.5 Studies related to Perceived Leadership Styles and Psychological Empowerment of Teachers

The relationship between ‘leadership styles of school principals’ and ‘psychological empowerment of teachers’ has been a significant focus in educational research. ‘Psychological empowerment,’ which encompasses ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact,’ plays a critical role in fostering teacher wellbeing. The following section traces studies exploring how different ‘leadership styles’-such as ‘transformational,’ ‘transactional,’ and ‘laissez-faire’-affect the ‘psychological empowerment’ of teachers.

Song et al. (2026) studied the association between ‘transformational leadership,’ ‘psychological empowerment,’ and ‘job crafting’ among teachers working in medical universities in China and reported that ‘transformational leadership’ was positively related to teachers’ ‘psychological empowerment’, especially in terms of ‘meaning, competence, autonomy, and impact’. The results indicated that leadership characterised by support, encouragement, and inspiration contributed significantly to strengthening teachers’ sense of empowerment and facilitated their active engagement in institutional and professional activities.

Berhanu (2025), in a qualitative case study of primary schools in Ethiopia, explored strategies principals used to nurture teachers’ psychological empowerment. Interviewing principals and teachers revealed that leadership practices such as inviting teacher input, recognising contributions, providing autonomy in instructional choices,

and collaboratively establishing school goals significantly enhanced teachers' sense of "meaning, competence, impact, and self-determination."

Palacios (2024) conducted a quantitative correlational study exploring the association between 'principals' leadership styles' and 'teacher psychological empowerment' in public schools across the United States. Based on the 'Full Range Leadership Model' and 'Psychological Empowerment Theory,' the study revealed that transformational leadership was strongly linked to elevated levels of teacher empowerment. In contrast, 'transactional' and 'laissez-faire' leadership styles demonstrated considerably weaker relationships with empowerment outcomes.

Khoury (2024) found no significant gender differences in psychological empowerment across most dimensions, except for self-determination, where female teachers exhibited slightly higher scores. These findings suggested that while female teachers may report higher levels of empowerment in some settings, the influence of gender on empowerment was shaped by environmental and organisational factors.

In a related study, Atik and Celik (2023) focused on how empowering leadership behaviours displayed by school principals influenced teachers' job satisfaction, while also examining the mediating effects of trust and 'psychological empowerment.' Their findings indicated that empowering leadership not only had a direct positive impact on teachers' job satisfaction but also enhanced their feelings of psychological empowerment, with trust playing a significant intermediary role in this dynamic.

Sageer and Qureshi (2023) reported that female teachers experienced higher levels of psychological empowerment compared to their male counterparts. Their findings highlighted that female teachers reported significantly higher levels in dimensions such as meaning, competence, and impact, suggesting a stronger sense of professional confidence and role clarity.

A meta-analysis by Schermuly et al. (2022) assessed the contributions of various leadership styles to 'psychological empowerment'. The results showed that empowering, transformational, and servant leadership styles were all comparably effective in fostering psychological empowerment, underscoring the versatility of positive leadership practices in supporting teacher autonomy and motivation.

Dash and Vohra (2018) examined the impact of school principals' empowering leadership on teachers' job crafting, alienation, and commitment. The study found that empowering leadership positively influences teachers' 'psychological empowerment', which in turn enhances job crafting behaviours and organisational commitment while reducing feelings of alienation.

Bogler and Nir (2012) studied the effects of principals' 'transformational leadership' on teachers' 'motivation and commitment.' The research indicated that transformational leadership behaviours, such as fostering a shared vision and providing individualized support, were associated with higher levels of teacher empowerment and organisational commitment.

Thoonen et al. (2011) assessed how leadership styles influenced teacher motivation and empowerment in Dutch schools. The study found that 'transformational leadership' was positively correlated with 'psychological empowerment,' especially in the areas of meaning and competence.

Leithwood and Jantzi (2005) highlighted how transformational leadership in schools fosters teacher empowerment by creating a collaborative and supportive work environment. Teachers reported feeling more competent and autonomous under transformational leaders.

The reviewed studies emphasised the important role of 'principals' leadership styles' in shaping teachers' 'psychological empowerment.' Research consistently indicated that transformational leadership fosters higher levels of teacher empowerment by promoting decision-making autonomy, professional competence, and self-determination (Palacios, 2024; Atik & Celik, 2023; Schermuly et al., 2022). Transformational leaders were found to create collaborative, emotionally supportive environments that encouraged teacher participation and professional growth (Dash & Vohra, 2018; Bogler & Nir, 2012; Thoonen et al., 2011). In contrast, 'transactional' and 'laissez-faire' leadership styles were linked with diminished psychological empowerment, often characterised by limited autonomy and rigid performance expectations (Leithwood & Jantzi, 2005). These leadership approaches, which prioritize control and external rewards over teacher development, contributed less to fostering a sense of agency among teachers. Overall, the findings underscore the value

of transformational and empowering leadership practices in cultivating psychologically empowered and motivated teaching staff.

2.6 Studies related to Psychological Empowerment of Teachers and Workplace Bullying

The link between psychological empowerment of teachers and workplace bullying has garnered much attention in recent years. In educational environments, workplace bullying is a prevalent issue that can have a detrimental impact on the well-being, performance, and satisfaction of teachers. Studies that investigate the intricate relationship between these two concepts are presented in this section, with an emphasis on the potential for psychological empowerment to either reduce or intensify the effects of ‘workplace bullying.’

Okcu (2025) conducted a survey of Turkish teachers and found that empowering leadership practices lowered perceptions of organisational ostracism, thereby enhancing overall well-being at work.

Uslukaya et al. (2025) used longitudinal data to demonstrate that when teachers perceived their principals as empowering, they reported higher engagement and reduced feelings of professional isolation, suggesting that empowerment fostered resilience to ostracism and subtle forms of ‘bullying.’

Javid et al. (2023) explored the effects of ‘workplace bullying’ and knowledge hiding behaviour on ‘emotional exhaustion’ among Pakistani nurses, considering psychological empowerment as a moderating factor. The findings suggested that nurses with higher psychological empowerment were less likely to be affected by workplace bullying, indicating its buffering role against the adverse effects of bullying.

Wunnenberg (2020) studied psychosocial bullying among nurse educators, focusing on coping strategies and intent to leave. The study found that higher psychological empowerment was associated with more effective coping strategies and reduced intent to leave.

Hampton and Rayens (2019) examined the relationship between ‘psychological empowerment,’ ‘workplace bullying,’ and the intention to leave among nurse leaders. Their results showed that greater ‘psychological empowerment’ was associated with lower instances of ‘workplace bullying’ and reduced intent to leave, indicating that ‘psychological empowerment’ acts as a protective factor against bullying.

Fida et al. (2018) explored how self-efficacy influences individuals' perceptions of workplace incivility and bullying. Their findings revealed that higher levels of self-efficacy, an element of psychological empowerment, were linked to reduced perceptions and effects of 'workplace bullying.'

Blase & Blase (2018) investigated the role of school administrators in workplace bullying. The study found that teachers with higher psychological empowerment were less affected by bullying from school leaders, reinforcing the protective role of empowerment.

The review has shown that 'psychological empowerment' serves as a strong buffer against workplace bullying. Teachers who feel empowered, particularly in terms of autonomy, competence, and self-determination, are less likely to experience bullying and are better equipped to manage or resist such behaviours when they arise.

The reviews revealed the significant role of 'psychological empowerment' in mitigating the effects of 'workplace bullying.' Although studies have established a relationship between 'psychological empowerment' and reduced 'bullying,' most of this research has been conducted in the health and IT sectors. There remains a clear gap in the literature, as the role of psychological empowerment in addressing workplace bullying among teachers has not been extensively explored, indicating a need for further studies in the educational sector.

2.7 Studies related to Perceived Leadership Style, Psychological Empowerment of Teachers, and Workplace Bullying

The educational research has placed a substantial emphasis on the relationship between the 'psychological empowerment of teachers,' 'the leadership style of school principals,' and 'workplace bullying.' The 'psychological empowerment of teachers' and the incidence of 'workplace bullying' are both influenced by the leadership style, which in turn affects the ethos of educational institutions. This review analyses substantial research that has explored the complex interrelations between these three constructs over time.

Okcu et al. (2025), in a large-scale cross-sectional study involving 603 teachers across multiple provinces in Turkey, investigated the influence of principals' empowering leadership behaviours on teachers' sense of well-being and perceptions of organisational ostracism, a subtle form of workplace bullying. The study found that

empowering leadership significantly reduced feelings of ostracism and enhanced well-being at work. Moreover, organisational ostracism served as a mediator, indicating that empowerment practices indirectly safeguard teachers against exclusion and mistreatment. The findings suggested that inclusive leadership enhances psychological empowerment while curbing exposure to bullying-like behaviours.

Onan et al. (2025) examined how positive leadership styles, ‘servant,’ ‘authentic,’ and ‘transformational leadership,’ contributed to teachers’ psychological resilience, and how this resilience protects against stress and potential burnout. Empowered and resilient teachers were better able to cope with or resist bullying behaviours in the workplace. The study showed psychological resilience acted as a partial mediator between ‘leadership style’ and ‘reduced burnout,’ highlighting empowerment as a key mechanism that buffered against adverse conditions including bullying.

Pietsch and Tulowitzki (2017) found that transformational leadership was effective in empowering teachers, which reduced their vulnerability to bullying. Teachers who felt more competent and autonomous reported fewer instances of bullying, while those in schools with transactional or authoritarian leaders reported more bullying and lower empowerment levels.

Skaalvik and Skaalvik (2014) found that when school leaders exhibited transformational behaviours, teachers reported greater empowerment and were less likely to experience ‘emotional exhaustion’ or workplace mistreatment. The study emphasised that transformational leadership fosters a supportive environment conducive to autonomy and decision-making, buffering teachers against negative organisational behaviours.

Thoonen et al. (2011) further supported this perspective by demonstrating that transformational leadership enhances teachers’ sense of competence, influence, and self-determination, which not only improves instructional practices but also shields them from harmful behaviours such as bullying. Empowered teachers, the study noted, are more resilient and proactive in addressing adverse workplace conditions.

This literature study has been divided into sections to improve the stability and structure of vital information. Though a study of the literature indicated that much research has been conducted about teacher burnout and the function of leadership styles

in relation to it, there is a scarcity of studies looking into the influence of workplace bullying and psychological empowerment. Furthermore, the investigation identified few studies on this topic at the secondary school level. As a result, it has been found to be a topic worth investigating further to uncover specific leadership styles that can help to mitigate the harmful impacts of this condition.

The reviewed literature provided a comprehensive understanding of the intricate relationships among perceived leadership styles, teacher burnout, workplace bullying, and psychological empowerment. Numerous studies affirmed the protective role of ‘transformational leadership’ in reducing ‘burnout’ and ‘workplace bullying,’ while authoritarian, laissez-faire, and indifferent styles had been linked to adverse outcomes such as emotional exhaustion and depersonalisation. Similarly, research studies underscored that teacher burnout and bullying experiences were being shaped by demographic variables such as ‘gender,’ ‘school type,’ ‘locality,’ and ‘teaching experience,’ notably with female, urban, and less experienced teachers being particularly vulnerable. Furthermore, psychological empowerment consistently emerged as a vital protective factor, enhancing resilience and buffering the negative effects of bullying and poor leadership. However, despite the breadth of studies, the literature revealed notable gaps. Most existing research examined these constructs in isolation, with limited exploration of their combined and interrelated effects within secondary school contexts. Additionally, while workplace bullying and psychological empowerment had been studied extensively in corporate or healthcare sectors, their intersection with educational leadership-particularly in Indian secondary schools-remains underexplored. The aforementioned reviews underscore a critical need for integrative research that simultaneously investigates the mediating role of workplace bullying and the moderating role of psychological empowerment in the relationship between perceived leadership styles and teacher burnout. Addressing this gap can yield actionable insights for fostering healthier, more empowering school environments and enhancing teacher well-being.

CHAPTER-III

METHODOLOGY

The previous chapter focused on how to formulate a research problem by reviewing relevant literature. This chapter outlines the steps followed by the researcher to address and solve the research problem. The methodology and procedure are critical components of any research study, involving the sampling process, the selection and description of research instruments, and the statistical analysis of data. “Research methods include all the techniques and procedures used to carry out the research effectively” (Koul, 2009). Educational research questions can arise from any field of study within education, but they are addressed in various ways, depending on whether the research is fundamental, applied, or action-oriented. The approach to research is influenced by the specific steps of the scientific method, which guide the trials and strategies undertaken to find answers and solutions to the posed questions.

Research methodology can be understood as the comprehensive framework that guides the researcher through the entire process of investigation. It encompasses all the systematic steps involved in addressing the research problem, including identifying and defining the problem, reviewing the existing literature, formulating research questions or hypotheses, and selecting appropriate methods for data collection and analysis. Research methodology not only focuses on the logical principles and strategies underlying the research process but also ensures that the study follows a coherent and organized structure. According to Naik and Giri (2018), “it involves a detailed analysis of the methods used to collect and interpret data, which ultimately leads to drawing conclusions based on the evidence gathered.” Thus, research methodology is crucial as it provides a clear direction for conducting research in a methodical, reliable, and replicable manner.

This chapter outlines the research methodology adopted for the study, presenting the research questions and corresponding hypotheses formulated based on the identified research problem. It further describes the sampling method, data collection procedures, and research instruments used, along with their validation processes. Additionally, the chapter details the statistical tools applied for data analysis, offering a comprehensive overview of the methodological framework guiding the study.

3.1 Research Method

In the present study, focusing on the objectives and hypotheses, the researcher employed the descriptive survey method. Koul (2009) defined “descriptive research as studies that describe systematically the facts and characteristics of a given population or area of interest, factually and accurately.” This approach aimed to depict situations as they naturally occur, without experimental manipulation, focusing on understanding the current state of phenomena. This type of research is mainly concerned with the present, although it often considers past events to better understand current conditions. In the current study, descriptive method was employed to explore the ‘perceived leadership styles’ of principals and ‘burnout’ among secondary school teachers of Assam and the role of ‘workplace bullying’ and ‘psychological empowerment.’

3.2 Research Design

Koul (2009) described research design as an organised plan that specifies the procedures for gathering, measuring, and analysing data to systematically and effectively achieve the research objectives. It ensures systematic testing of hypotheses and reliable conclusions about relationships between variables. Factors like study objectives, variable nature, and research setting guide design selection, aimed at providing accurate, relevant insights while maintaining efficiency and cost-effectiveness.

The present study was quantitative research where the survey method was adopted to identify the opinion, perceptions, or the characteristic responses of the sample. The responses represent the characteristics of the population (Koul, 2009). The present study was aimed to examine the ‘perceived leadership styles’ of principals vis-a-vis teacher’s burnout, workplace bullying and psychological empowerment in the two districts of Assam namely, Dibrugarh and Tinsukia. All the four tools employed, namely, “Teachers’ perception of their school principal leadership style questionnaire” (Uri Even & Iris BenDavid-Hadar, 2021), “Copenhagen Burnout Inventory” by Tage S. Kristensen, Marianne Borritz, Ebba Villadsen, and Karl B. Christensen (2005), “Negative Acts Questionnaire-Revised” by Stale Einarsen, Helge Hoel, and Guy Notelaers (2009), and “Psychological Empowerment Scale” by Gretchen M. Spreitzer (1995) were administered on the secondary school teachers teaching in government and private schools affiliated to/recognised by ‘Board of Secondary Education, Assam’.

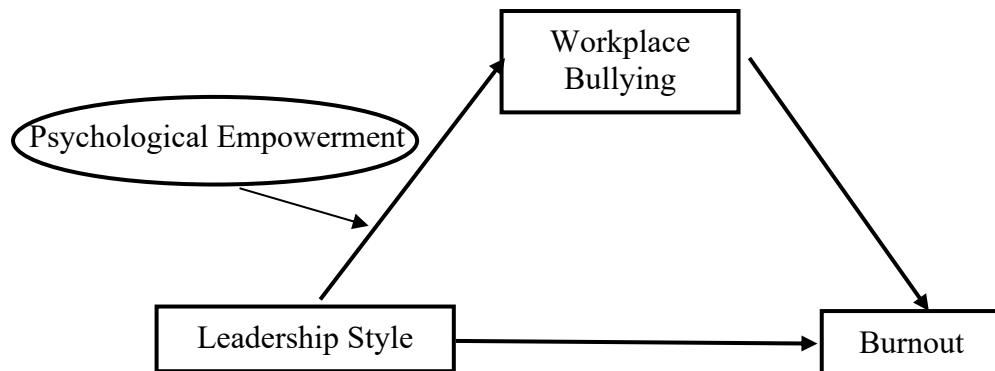


Figure. 3.1 Research Design

3.3. Population

The population of this study comprised of all the secondary school teachers working in government and private high schools affiliated to/recognised by the Board of Secondary Education, Assam. Assam is a state in north-eastern India. The state has 35 districts with government and private schools. The districts are divided into several educational blocks. As per CEI Data, there are a total of 4,032 government and private secondary schools affiliated to/recognised by the Board of Secondary Education, Assam (<https://ceidata.com/en/india>).

Geographically, Assam is divided into three major regions:

1. The Brahmaputra Valley
2. The Barak Valley
3. The hilly regions, which include the North Cachar Hills

The ‘Brahmaputra Valley’ holds unique demographic features, encompassing around 72% of Assam’s total land area. According to data from the Census of India (2011), this region is home to approximately 26,377,882 people, accounting for 84.63% of the state’s total population of 31,169,272. The gender composition in the valley indicates that 54% are male, while 46% are female.

Furthermore, the course of the ‘Brahmaputra River’ provides a natural division of the state into Upper Assam and Lower Assam. Upper Assam consists of nine districts, while Lower Assam comprises thirteen districts, as outlined in Table 3.1.

The Barak Valley, consisting of 3 districts, accounts for approximately 15% of Assam’s total population. Meanwhile, the Hilly Regions, which include two districts, have a population of around 1.1% of the state's total. Together, the Barak Valley and

Hilly Regions constitute approximately 16% of Assam's population, while the Brahmaputra Valley remains the dominant demographic region.

Table 3.1 Distribution of the districts in the Brahmaputra valley of Assam

Upper Assam Districts	Lower Assam Districts
Charaideo	Baksa
Dhemaji	Barpeta
Dibrugarh	Bajali
Golaghat	Bongaigaon
Jorhat	Chirang
Lakhimpur	Dhubri
Majuli	Goalpara
Sivasagar	Nalbari
Tinsukia	Kamrup Metropolitan
	Kamrup Rural
	Kokrajhar
	South Salmara Mankachar
	Tamulpur

Source: Government of Assam. (n.d.). Districts of Assam. Retrieved October 5, 2025, from <https://assam.gov.in/>

3.4 Sample

Sampling is "the process by which a relatively small number of individuals or measures of individuals, objects, or events is selected and analysed in order to find out something about the entire population from which it was selected" (Koul, 2009). This smaller group, chosen through systematic methods based on specific rules and procedures, is intended to represent the characteristics of the broader population. The sample must be selected thoughtfully to represent the diversity and key attributes of the broader population, enabling the researcher to derive findings that are both valid and generalizable. Sampling is thus a crucial step in research, as it directly impacts the reliability and validity of the findings.



Figure. 3.2 Sampling Process

In the present study, a stratified multistage sampling technique has been employed. Multistage sampling is described as a procedure where a sample is selected in phases, moving from a broad level to a narrower, more focused sample in successive steps (Koul,2009). In this approach, a sample of primary units is initially selected, followed by the selection of secondary units within each primary unit. Multistage sampling tends to create a more representative sample than single-stage sampling methods by incorporating multiple levels of selection. Stratified sampling, by contrast, entails segmenting the population into specific strata or subgroups, followed by random sampling within each group. These strata are typically defined by characteristics such as age, educational attainment, or occupation. Stratified sampling is especially useful when there is substantial variation within the population, as it ensures adequate representation of every subgroup within the sample (Acharya et al., 2013). The purpose of this method is to achieve more precise and reliable results by reflecting the diversity of the population.

To obtain a representative sample, a stratified multistage sampling technique was adopted, whereby at each stage, strata were created, and a final sample was selected within each stage and within each stratum. Initially, the selected primary sampling units (first stage) were stratified and divided into secondary units (second stage), which were again stratified. Within those secondary units, third-level units (third stage) were chosen, and these units were also stratified. Stratification ensures representation throughout the sampling process. Though explicit stratification occurred at each stage,

the final sampling units (teachers) were implicitly stratified as they were nested within homogeneously stratified primary and secondary units. At each stage, stratification was either conducted explicitly through formal groupings or implicitly via an ordered list from which selections were made. This combination of stratification and multistage sampling techniques resulted in a more representative final sample (Acharya et al., 2013). This approach ensures that diverse subgroups are adequately represented, improving the accuracy and reliability of the study's findings.

The Brahmaputra Valley region, home to 84.63% of Assam's total population, was chosen as the study area due to its demographic significance. Specifically, the study focused on the nine districts of Upper Assam, selected as primary units because they offered cost feasibility, time efficiency, better accessibility, and good potential for representative sampling. In contrast, the districts of Lower Assam were not included due to challenges related to distance, logistical constraints, and limited feasibility within the scope of the study.

The socioeconomic status (SES) of teachers is a significant determinant of their well-being, morale, and professional performance (OECD, 2021). As defined by the 'American Psychological Association,' SES is typically assessed through a composite measure of education, income, and occupation, serving as an indicator of an individual's or group's social standing. Low SES among teachers has been linked to diminished work satisfaction and morale, particularly in contexts where wages remain stagnant despite rising living costs. The U.S. House of Representatives (2019) reported that teachers frequently experience low morale, largely due to the widening gap between modest salaries and the high cost of living. This economic strain often translates into job dissatisfaction and insecurity. Ashraf et al. (2019) further underscored the critical role of SES in educational outcomes, identifying it as a key factor influencing teacher performance. Moreover, Richards et al. (2018) established clear associations between low SES, reduced morale, impaired job performance, and heightened burnout levels among teachers. In light of these findings, districts were selected based on a SES index to ensure a comprehensive understanding of these dynamics.

According to the economic survey, Assam, 2020-21 by the 'Directorate of Economics and Statistics, Govt. of Assam', districts were categorised based on a composite index of sustainable economic growth and socio-economic development.

Dibrugarh (score 0.52) has been in ‘comparatively better’ category (score range 0.51-0.76), while Tinsukia (score 0.45) has been listed in the ‘poor’ category (score range 0.27-0.50) (Economic Survey, Assam, 2020-21). Selecting these two districts allowed the investigator to explore how varying socio-economic conditions influence teacher burnout, providing valuable insights into factors affecting well-being and job performance. In the present study, sampling was done in stages:

Stage1: Hence the primary units at the first stage included 9 districts of Upper Assam. Further, two districts, namely, Dibrugarh and Tinsukia were selected based on the criteria as mentioned above. Thus, primary stage sampling unit was stratified based on socio-economic status.

Stage 2: As in multistage sampling, secondary stage units were selected from each of the primary stage units. Each selected district at the primary stage comprises several educational blocks. Out of the 6 educational blocks in Dibrugarh and 5 in Tinsukia, 1 block from each district was chosen based on the availability of both government and private secondary schools affiliated to/recognised by the Board of Secondary Education, Assam in both rural and urban areas. Other blocks in these districts were not considered as they did not offer the same scope for a balanced representation of school types and locations. Thus, secondary stage sampling unit was stratified based on educational blocks.

Table 3.2 Number of schools covered in sample

S.no.	Districts	Educational Blocks	Total Schools		Number of Schools covered in sample		
			Rural	Urban	Rural	Urban	Total
1	Dibrugarh	Tengakhata	35	22	4	4	8
2	Tinsukia	Hapjan	41	38	7	7	14
		TOTAL	76	60	11	11	22

Source: (<https://schools.org.in/assam>)

Stage3: In the third stage, from each of the selected educational blocks, namely, Tengakhata (Dibrugarh) and Hapjan (Tinsukia), secondary schools affiliated to/recognised by the Board of Secondary Education, Assam, were sampled to ensure comprehensive coverage. Further, out of these, only those schools were selected from each of the educational blocks which had teachers of all experience groups (‘less than 5 years’, ‘5-10 years’, and ‘more than 10 years’). Table 3.2 provides the number of schools included in the sample,

Stage 4: In the fourth stage, the final sampling unit, that is, teachers were selected. After selecting the secondary schools, a representative sample of secondary school teachers from two earmarked districts Tengakhata (Dibrugarh) and Hapjan (Tinsukia) were selected proportionately.

3.4.1 Sample Size

According to available data (2015), the number of secondary school teachers in Assam was found to be 122,560 (<https://ceidata.com/en/india>). To select a representative sample, an online sample size calculator ‘goodscalculators.com’ was used, which required inputs such as the confidence level, margin of error, and population size to estimate the minimum sample needed for the study (Taherdoost, 2017). Based on a 95% confidence level and a 5% margin of error, the calculator estimated that a sample size of 384 teachers would be necessary to represent the population of teachers in Assam. To address potential issues such as unengaged responses, missing data, and outliers, a sample size of 470 was collected, exceeding the requirement of 384 participants. Secondary school teachers were approached personally by the investigator to gather the necessary data for the study. Following the data cleaning process, as recommended by Hair et al. (2009), the final sample size for analysis and interpretation was refined to 450 participants, which remained substantially larger than the initial calculated sample size. Krejcie and Morgan (1970) provided a sample size determination table indicating that, for large populations exceeding 100,000, a sample size of approximately 384 is adequate to achieve a 95% confidence level with a 5% margin of error. Consistent with this guideline and considering standard practices discussed by Sekaran and Bougie (2016), a sample size in the range of 384 to 450 may be considered adequate for behavioural and social science research to ensure representativeness and minimize sampling error. This approach ensured a reliable dataset for the study.

Table 3.3 Selection of teachers from educational blocks Tengakhat and Hapjan

Educational Block	Total Number of teachers in the Block	Total number of Male teachers in the Block	Male Teachers selected in the Block	Total number of Female teachers in the Block	Female Teachers selected in the Block	Total Teachers selected in the Block
Tengakhat	726	305	92	421	126	218
Hapjan	843	382	114	461	138	252
Total	1569	687	206	882	264	470

Table 3.4 Number of teachers from Educational Blocks Tengakhat and Hapjan

Type of school and Location	Tengakhat Block			Hapjan Block			Final sample
	M	F	Total	M	F	Total	
Govt. Schools in RURAL area	147	180	327	98	102	200	527
Private Schools in RURAL area	116	211	327	227	259	486	813
Govt. Schools in URBAN area	10	8	18	28	46	74	92
Private Schools in URBAN area	32	22	54	29	54	83	137
Total	305	421	726	382	461	843	1569
Proportionate Sample (30%)	92	126	218	114	138	252	470

Note: F=Female and M=Male

Table 3.5 Final sample of teachers from each block of two districts

Tengakhat Block								Hapjan Block							
Rural				Urban				Rural				Urban			
Govt		Private		Govt		Private		Govt		Private		Govt		Private	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
36	45	30	57	4	2	22	22	39	42	42	54	21	27	12	15
Grand Total								470							

Note: F=Female and M=Male

Table 3.3 outlines the total number of teachers in the educational blocks of Tengakhat and Hapjan, located in the districts of Dibrugarh and Tinsukia, respectively. The total teacher population across the two blocks was 1,569, and a sample size of 470 teachers, representing 30% of the total, was selected for the study. To ensure proportional representation across both blocks, 30% of the total number of male and female teachers was calculated, as detailed in Table 3.4. Additionally, Table 3.5 presents the final distribution of teachers sampled from each block in the two districts.

The proportion of teachers to be selected from each educational block was determined by calculating the ratio of the total number of teachers in a specific block to the total number of teachers across both blocks, multiplied by the total sample size of 470. Based on this calculation, 218 teachers (92 males and 126 females) were selected randomly from Dibrugarh, and 252 teachers (114 males and 138 females) were selected from Tinsukia. The RAND function in Excel was used to generate random numbers for each teacher in the list, which were then sorted to facilitate unbiased selection. This approach allowed for fair gender representation and enhanced the robustness of the sample. Thus, within the fourth stage a representative sample of 470 teachers (206 male and 264 female) was selected proportionately.

Sunbul (2003) found a significant relationship between ‘teaching experience’ and ‘burnout levels’. Byrne (1998) and Konert (1997) reported that teachers with 0–10 years of experience scored higher on the Maslach Burnout Inventory compared to those with more than 10 years of experience, suggesting that less experienced teachers exhibited greater burnout. However, Sunbul (2003) also noted that teachers with more years of experience showed elevated levels of ‘emotional exhaustion’ and ‘depersonalisation’. Ozdemir (2007) proposed that burnout tends to manifest during the early and later stages of a teacher’s career, with mid-career teachers demonstrating greater resilience and coping skills, resulting in lower burnout levels compared to novice teachers and those with over 24 years of experience. Fisher (2011), in a study examining differences in ‘stress’ and ‘burnout’ between new and experienced teachers, found only a minor difference in stress levels and a slightly higher burnout score among novice teachers.

Several studies have suggested that younger teachers are more prone to emotional exhaustion than those with greater professional experience (Antoniou et al., 2006; Brunsting et al., 2014; Lau et al., 2005). Mendes (2002) found that with more experiences, teachers were better at identifying emotions. Lau et al., (2005) explored the relationship between teachers’ experience and ‘burnout’ and found that in all three burnout syndromes, teachers who were less experienced were more consistently burnt-out.

Whitehead et al. (2000) found the more levels of burnout in middle grade teachers and in the 30–39-year age group. The study of Al-Kharabsheh and Uleimat (2005) found that the burnout level was higher with teachers of more than 5 years' experience (as cited in El-Omari et al.,2011). The study by Agyapong (2022) indicated that teachers with less experience have lower levels of burnout.

The inconsistent findings in the studies suggested that burnout was prevalent among all groups of teachers with difference in years of experience. Since burnout has been prevalent among teachers belonging to different groups in terms of years of experience, 3 groups of teachers- “less than 5 years, 5-10 years,10 years and above”- were included in the study. The following Table 3.6 shows final sample of teachers based on years of experience drawn from each block of Dibrugarh and Tinsukia districts

Table 3.6 Detailed plan of sample from the two districts

Total Experience			Less than 5 years	5-10 years	10 years and above	Total
Rural	Govt	Male	14	24	36	74
Rural	Pvt	Male	18	22	33	73
Urban	Govt	Male	6	10	9	25
Urban	Pvt	Male	11	9	14	34
Rural	Govt	Female	17	31	39	87
Rural	Pvt	Female	34	37	40	111
Urban	Govt	Female	10	9	10	29
Urban	Pvt	Female	12	14	11	37
TOTAL			122	156	192	470

Note: Govt=Government, Pvt=Private

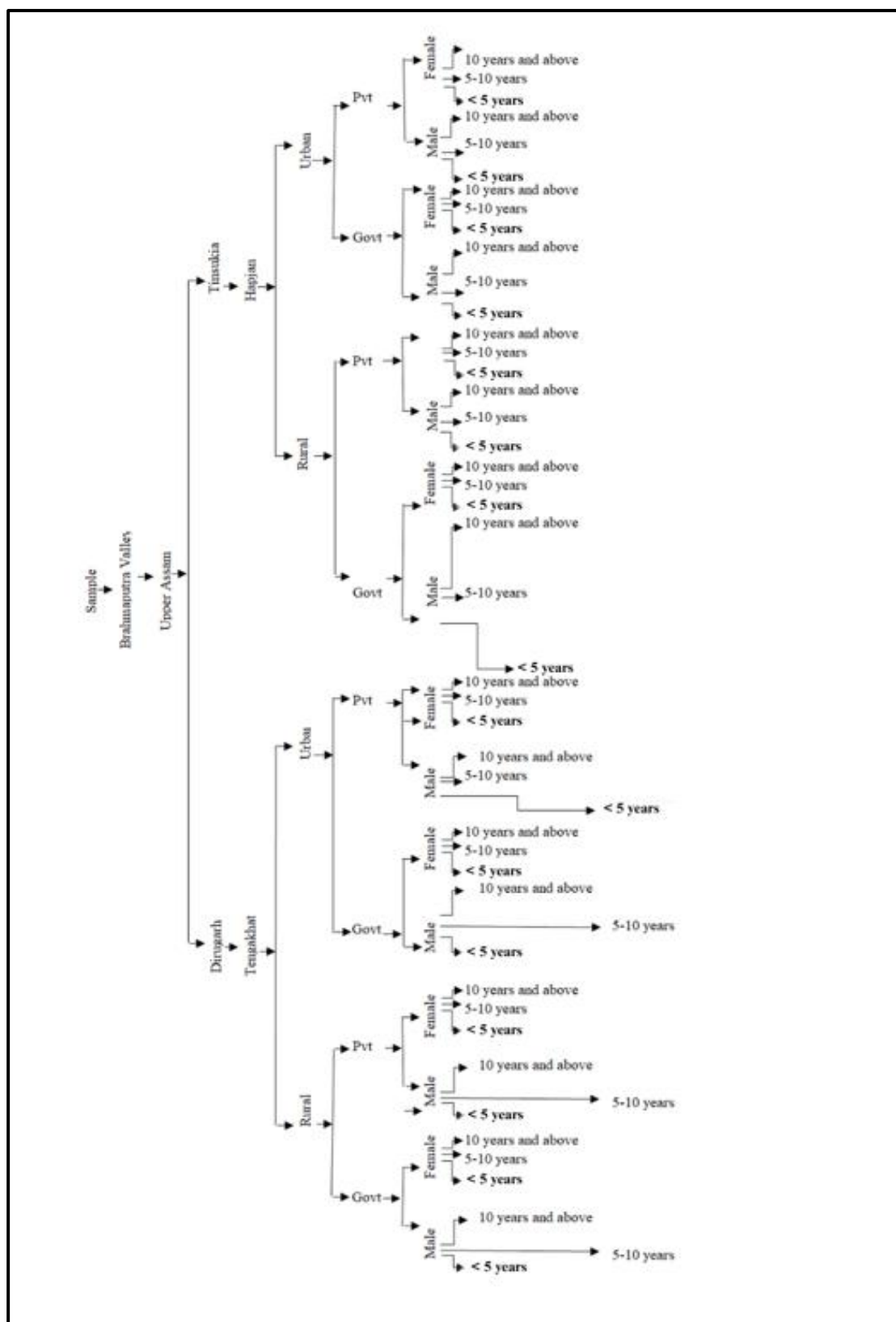


Figure 3.3 Pictorial representation of the sample

For the purpose of this study, Tengakhat block from Dibrugarh district and Hapjan block from Tinsukia district were selected out of the six and five educational blocks available in their respective districts. These two blocks were chosen as these comprised of both government and private secondary schools affiliated to/recognised by the Board of Secondary Education, Assam situated in rural and urban areas, which was essential to achieving a balanced and diverse sample. The remaining blocks in each district were excluded as they lacked either the necessary distribution of school types or did not include teachers across all relevant experience categories. In some cases, logistical challenges and limited accessibility further restricted the feasibility of conducting research in those areas within the available time and resource constraints.

The final sample of 470 teachers (representing approximately 30% of the total 1,569 teachers in the two selected blocks) reflected appropriate proportions of male (206) and female (264) teachers. The inclusion criteria required that participants be (i) full-time secondary school teachers teaching classes IX and X, (ii) employed in schools affiliated/recognised to Board of Secondary Education, Assam, and (iii) belonging to one of three experience categories- “less than 5 years, 5–10 years, and more than 10 years.” Teachers were excluded if they (i) held temporary or part-time positions, (ii) were on extended leave during the study period, or (iii) declined to provide informed consent.

3.5 Tools Used

This study employed four instruments for data collection. Choosing appropriate research tools and methods is crucial, as the suitability of the instruments directly influences the validity and reliability of the study’s results. Various criteria must be considered when choosing the instruments, such as the nature of the study's objectives and hypotheses, the competence of the respondents, the type of sample, and the availability and suitability of the tools for the specific context of the research (Creswell & Creswell, 2017). Following an extensive review of the literature, the researcher selected four tools deemed most appropriate for data collection in this study. These tools were chosen to ensure that the data gathered would effectively address the research questions and provide insights aligned with the study's aims (Bryman, 2016).

1. Teachers' perception of their school principal leadership style questionnaire by Uri Even and Iris Ben David-Hadar (2021)
2. Copenhagen Burnout Inventory by Tage S. Kristensen, Marianne Borritz, Ebba Villadsen, and Karl B. Christensen (2005)
3. Negative Acts Questionnaire-Revised by Stale Einarsen, Helge Hoel, and Guy Notelaers (2009)
4. Psychological Empowerment Scale by Gretchen M. Spreitzer (1995)

3.5.1 Description of the 'Teachers' Perception of Their School Principal Leadership Style Questionnaire by Uri Even & Iris Ben David-Hadar (2021)'

'The Teachers' Perception of Their School Principal Leadership Style Questionnaire' by Uri Even and Iris Ben David-Hadar (2021) was designed to assess how teachers perceive the leadership styles of their principals. The original questionnaire was part of a broader research effort to analyse the impact of 'leadership style' on educational outcomes. The questionnaire comprised 15 items, examining three main 'leadership styles'- "transformational leadership, transactional leadership, and laissez-faire leadership".

Different dimensions of the school principal leadership style questionnaire are as follows:

- a) 'Transformational leadership style' pertains to a leadership style that inspires and motivates employees by promoting shared values, emphasising effort-goal alignment, and fostering personal commitment.
- b) 'Transactional leadership style' involves a result-oriented leadership style that adheres to organisational structures and rewards or penalises employees based on performance.
- c) 'Laissez-faire leadership style' is a leadership style characterised by the absence of decision-making and active engagement, reflecting a lack of leadership.

7 of 15 items were relevant to perceptions of the school principal as transformational (e.g. "indicates the importance of having a strong sense of purpose"). 4 of 15 items were relevant to perceptions of the principal as transactional (e.g. "Works with me satisfactorily"). 4 of 15 items dealt with perceptions of the principal as a

laissez-faire leader (e.g. “The principal is not there when I need him/her”). The item distribution of the factors of the scale has been presented in the Table 3.7.

Table 3.7 Dimension wise items of ‘Teachers’ Perception of Their School Principal Leadership Style Questionnaire’

Sl. No.	Dimensions	Item Numbers	Total Item
1	Transformational Leadership	2,7,9,11,12,13,15	7
2	Transactional Leadership	1, 6,8,14	4
3	Laissez-faire leadership	3,4,5,10	4
		TOTAL	15

Source: Extracted from “Teachers’ Perception of Their School Principal Leadership Style Questionnaire”

3.5.2 Reliability and validity

The reliability analysis of “The teachers’ perception of their school principal leadership style questionnaire” revealed a high Cronbach’s alpha of 0.94, indicating excellent internal consistency across the scale. Factor analysis identified three distinct leadership styles-“transformational, transactional, and laissez-faire.”

3.5.3 Administration and scoring

“The teachers’ perception of their school principal leadership style questionnaire” is a 5-point Likert-type scale ranging from 1 (Never) to 5 (Always). The scoring of the tool is as follows: 1 = Never, 2 = Seldom, 3 = Occasionally, 4 = Often, and 5 = Always.

3.5.4 Validation of “Teachers’ Perception of Their School Principal Leadership Style Questionnaire” in Indian context

Even and David-Hadar (2021) validated the “Teachers’ Perception of Their School Principal’s Leadership Style Questionnaire” using a sample of Israeli school teachers. However, the validation of the tool in specific cultural settings, such as Israel, cannot be generalized to other ethnic and racial groups. This highlighted the need to adapt and validate the scale in the Indian socio-cultural context.

Factor analysis (FA) is a statistical method that simplifies a large set of variables by grouping them into smaller, interpretable factors based on shared patterns or correlations. According to Coakes (2013), it groups variables with similar

characteristics and determines if one or multiple factors are present in collected data. Hair et al. (2009) outline three main purposes of FA: understanding the underlying structure of data, identifying the most significant factors, and evaluating the adequacy of measures for hypothesis testing.

Validation research typically requires an adequate sample size, with general guidelines suggesting a minimum of 50–100 participants. Some methods, however, necessitate larger sample sizes. In line with the guideline proposed by Boateng et al. (2018), which suggests maintaining an ideal ratio of 10 participants for each item, a sample of 200 secondary school teachers was chosen for the study. These teachers, drawn from government and private schools in rural and urban areas of Assam, provided a robust foundation for scale validation in India.

3.5.5 Exploratory factor analysis of “Teachers’ Perception of Their School Principal Leadership Style Questionnaire”

To validate the scale, a reliability analysis was initially conducted, resulting in a Cronbach's alpha of 0.92 across 15 items spanning three dimensions. While this high alpha value suggests strong internal consistency, it may also indicate redundancy, as items could be overly similar and fail to provide unique contributions to the scale (Tavakol & Dennick, 2011). Cronbach's alpha measures internal consistency, reflecting how well a group of items collectively captures a single construct. Generally, reliability values between 0.70 and 0.90 are considered acceptable (Nunnally & Bernstein, 1994, as cited in Danner, 2016). However, when alpha exceeds 0.90, it raises concerns about item redundancy and a lack of diversity, potentially reducing the scale's effectiveness (Streiner, 2003). Excessively high alpha values may suggest that some items do not add unique value to the construct being measured, warranting a review of the scale's items for possible refinement. To investigate this further, an inter-item correlation matrix was generated to identify potential redundancies and assess item contributions.

Table 3.8 Reliability information of “Teachers’ Perception of Their School Principal Leadership Style Questionnaire”

Item-Total Statistics					
Dimension	Items	Corrected Item-Total Correlation	Cronbach’s Alpha Index (Dimension Wise)	Corrected Item-Total Correlation (15 items)	Cronbach’s Alpha Index (15 items)
TRF	TRF1	.966	0.986	.834	0.927
	TRF2	.910		.789	
	TRF3	.957		.805	
	TRF4	.966		.818	
	TRF5	.951		.824	
	TRF6	.950		.806	
	TRF7	.922		.785	
TRN	TRN1	.980	0.970	.441	
	TRN2	.786		.565	
	TRN3	.980		.452	
	TRN4	.983		.447	
LF	LF1	.980	0.990	.556	
	LF2	.979		.569	
	LF3	.980		.574	
	LF4	.957		.542	

Note: TRF= ‘Transformational Leadership,’ TRN= ‘Transactional Leadership,’ LF= ‘Laissez-faire leadership’

Items with high inter-item correlations (Corrected Item-Total Correlation) can suggest that they are measuring very similar aspects of the construct, which can inflate Cronbach’s alpha without improving the scale’s content validity (Tavakol & Dennick, 2011). Deleting such redundant items may reduce alpha slightly but improve the parsimony and validity of the scale. Therefore, items with similar/very close inter-item correlations were identified for review, based on the assumption that such high correlations indicate redundancy (Clark & Watson, 2016).

Some items were identified as redundant due to high correlations, indicating they were measuring the same construct in a highly similar manner. Items TRF1 and TRF4, measuring transformational leadership, had a correlation of 0.96, while Items TRF5 and TRF6 also showed a correlation above 0.95, suggesting overlap in their assessment. Similarly, Items TRN1 and TRN3, measuring transactional leadership, had a correlation of 0.98, highlighting redundancy. Finally, Items LF1 and LF3, which

measured laissez-faire leadership, also exhibited a correlation of 0.98, indicating overlap in assessing this dimension. These findings underscore the need for item refinement to ensure uniqueness and value in measurement.

Four items were removed due to redundancy and lack of additional value. Specifically, Item TRF1 was removed as it was redundant with Item TRF4, and Item TRF6 was eliminated for its redundancy with Item TRF5. Similarly, Item TRN3 was excluded for being redundant with Item TRN1, and Item LF1 was removed due to its redundancy with Item LF3. These removals ensured that only unique and valuable items are retained.

To improve the efficiency of the scale and reduce redundancy, four items (two items from transformational leadership, one each from transactional and laissez-faire leadership) were dropped, with the expectation that it would lower the Cronbach's alpha to a more acceptable level, reflecting a better balance between reliability and item uniqueness (DeVellis, 2021). Post-item deletion, the reliability of the four factors was reassessed using Cronbach's alpha. This resulted in a slightly lower Cronbach's alpha of 0.89 (Table 3.9), which still indicated good reliability without redundancy.

Table 3.9 Reliability information of “Teachers’ Perception of Their School Principal Leadership Style Questionnaire”

Item-Total Statistic					
Dimension	Items	Corrected Item-Total Correlation	Cronbach's Alpha Index (Dimension Wise)	Corrected Item-Total Correlation (11 items)	Cronbach's Alpha Index (11 items)
TRF	TRF2	.898	.978	.770	.897
	TRF3	.951		.788	
	TRF4	.967		.808	
	TRF5	.941		.807	
	TRF7	.923		.775	
TRN	TRN1	.955	.945	.405	
	TRN2	.786		.553	
	TRN4	.957		.412	
LF	LF2	.974	.985	.549	
	LF3	.979		.555	
	LF4	.948		.522	

Note: TRF= 'Transformational Leadership,' TRN= 'Transactional Leadership,' LF= 'Laissez-faire leadership'

Following the removal of four items, an exploratory factor analysis was conducted again to re-examine the factor structure. The exploratory factor analysis confirmed that the underlying factor structure remained intact, with all the remaining 11 items loading strongly onto their respective factors, further validating the decision to remove the redundant items. The revised factor solution explained 93.3% of the variance. Principal component analysis was used for factor extraction, and Kaiser's criterion (Eigenvalue > 1) and scree plot were used to determine the number of factors. A Varimax rotation was applied to achieve a simpler and interpretable factor.

The Kaiser-Meyer-Olkin (KMO) test assesses the adequacy of the sample for conducting factor analysis, where values above 0.5 are deemed acceptable and higher values reflect stronger suitability (Hutcheson & Sofroniou, 1999). In the present study, the KMO value surpassed 0.5, indicating satisfactory sampling adequacy. Furthermore, Bartlett's Test of Sphericity produced a highly significant p-value ($p = 0.000$), fulfilling the criterion of $p < 0.001$ (Loewen et al., 2015). Collectively, these findings confirmed that the dataset was appropriate for factor analysis. The detailed results are presented in Table 3.10.

Table 3.10 KMO and Bartlett test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.807
Bartlett's Test of Sphericity	Approx. Chi-Square	4035.282
	Df	55
	Sig.	.000

Three factors had eigenvalues greater than 1, explaining a total of 93.3% (Table 3.11) of the variance. Items loaded on the three expected factors, with all the items showing loadings greater than 0.60, indicating that they were strongly associated with their respective factors.

Table 3.11 Total variance explained

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.704	51.852	51.852	5.704	51.852	51.852	4.580
2	2.444	22.216	74.068	2.444	22.216	74.068	2.951
3	2.119	19.262	93.331	2.119	19.262	93.331	2.735
4	.278	2.529	95.860				
5	.154	1.401	97.261				
6	.111	1.006	98.266				
7	.076	.694	98.960				
8	.060	.542	99.502				
9	.037	.340	99.843				
10	.014	.132	99.974				
11	.003	.026	100.000				

The items were grouped logically according to the three hypothesized dimensions, and no cross-loadings were found (Table 3.12). All Cronbach's alpha values were above the commonly accepted threshold of 0.70 (Nunnally & Bernstein, 1994, as cited in Tavakol et al., 2011), indicating good internal consistency for each factor.

Table 3.12 Results of exploratory factor analysis

	Component		
	1	2	3
TRF4	.959		
TRF3	.952		
TRF7	.934		
TRF5	.933		
TRF2	.910		
LF3		.966	
LF2		.965	
LF4		.959	
TRN1			.979
TRN4			.979
TRN2			.864
<i>Extraction Method: Principal Component Analysis.</i>			
<i>Rotation Method: Varimax with Kaiser Normalization.</i>			

Note: TRF= 'Transformational Leadership,' TRN= 'Transactional Leadership,' LF-= 'Laissez-faire leadership'

3.5.6 Results of confirmatory factor analysis

“The teachers’ perception of their school principal leadership style questionnaire” was validated in the Indian context using a sample of 200 secondary school teachers from Assam for confirmatory factor analysis. While the ideal sample size depends on data normality and the estimation method, a commonly accepted guideline is a 10:1 respondent-to-item ratio (Schreiber et al., 2006). This ratio ensures sufficient statistical power for analysis (Clark & Watson, 2016; DeVellis, 2021). Confirmatory factor analysis was employed as it aligns with the theoretical framework of perceived leadership styles as assessed through the original scale.

Confirmatory Factor Analysis (CFA) was conducted using AMOS software to evaluate the adequacy of the measurement model. Several fit indices were employed to assess model fit, including the ‘Chi-square (χ^2) statistic,’ ‘Comparative Fit Index (CFI),’ ‘Tucker-Lewis Index (TLI),’ ‘Root Mean Square Error of Approximation (RMSEA),’ and ‘Standardized Root Mean Square Residual (SRMR).’ According to Hair et al. (2010), a model can be considered well-fitting if at least three to four of these indices meet the recommended threshold values. When the majority of fit indices exceed the

acceptable limits, it indicates that the hypothesised model is supported by the data (Schumacker & Lomax, 2016). The following fit indices (Table 3.13) were obtained.

Table 3.13 Measure of fitness indices

Measure Fit	Fit Indices	Measure Standard
PClose	0.441	> 0.05, Hu & Bentler, (1999)
CMIN/DF	1.523	The value of ratio of CMIN/df less than 3 (reasonably good indicator of model fit, Hoe, 2008).
RMSEA	0.051	The values from .05 to .10 recommend acceptable fit (Browne & Cudeck, 1992; MacCallum et al.,1996).
CFI	0.986	Hair et al. (2010) suggested that, value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit (p. 647). Lima-Rodríguez et al. (2015) reported the value of CFI less than 0.90.
SRMR	0.054	< 0.08, Hu & Bentler, (1999)
TLI	.982	TLI ranging from 0.85 and over 0.9 is a good fit (Hair et al., 2006; Kline, 2015)

Convergent and discriminant validity are crucial aspects of construct validity in confirmatory factor analysis. Convergent validity ensures that items within a construct are correlated, indicating they measure the same underlying concept. It is evaluated using average variance extracted (AVE), which should exceed 0.50, and composite reliability (CR), which should be greater than 0.70. Moreover, CR must be higher than AVE to confirm stronger internal consistency relative to the variance explained by the latent factor.

Table 3.14 CR, AVE, MSV, MaxR(H) of each dimension and Square Root of the Average Variance Extracted and Correlations Matrix

	CR	AVE	MSV	MaxR(H)	TRF	LF	TRN
TRF	0.924	0.709	0.296	0.932	0.842		
LF	0.947	0.856	0.016	0.950	0.125	0.925	
TRN	0.794	0.566	0.296	0.825	0.544***	-0.096	0.752

Note: TRF= 'Transformational Leadership,' TRN= 'Transactional Leadership', LF=- 'Laissez-faire leadership'

Convergent validity was established for all three constructs- 'transformational leadership,' 'laissez-faire leadership,' and 'transactional leadership.' 'Transformational leadership style' exhibited CR of 0.924 and AVE of 0.709, 'Laissez-faire leadership style' had CR of 0.947 and AVE of 0.856, and 'Transactional Leadership style' showed CR of 0.794 and AVE of 0.566. All CR values exceeded the threshold of 0.70, and AVE values surpassed 0.50, with CR consistently greater than AVE, indicating good internal consistency and a substantial proportion of variance explained for each construct.

Discriminant validity was also confirmed for the constructs. According to Fornell and Larcker's (1981) criteria, discriminant validity is established when (1) the Maximum Shared Variance (MSV) is lower than the Average Variance Extracted (AVE) for each construct, and (2) the square root of AVE exceeds inter-construct correlations. In this study, the MSV values for transformational leadership (0.296), laissez-faire leadership (0.016), and transactional leadership (0.296) were all lower than their respective AVE values, meeting the first criterion. Additionally, the square root of AVE for each construct was greater than the highest inter-construct correlation, satisfying the second criterion. For instance, the highest correlation ($r = 0.544$ between transformational leadership and transactional leadership) was below the square root of their AVEs (transformational leadership = 0.842, transactional leadership = 0.752), confirming that the constructs are distinct. Overall, the scale demonstrated robust psychometric properties, with constructs that were both internally consistent and distinct from one another.

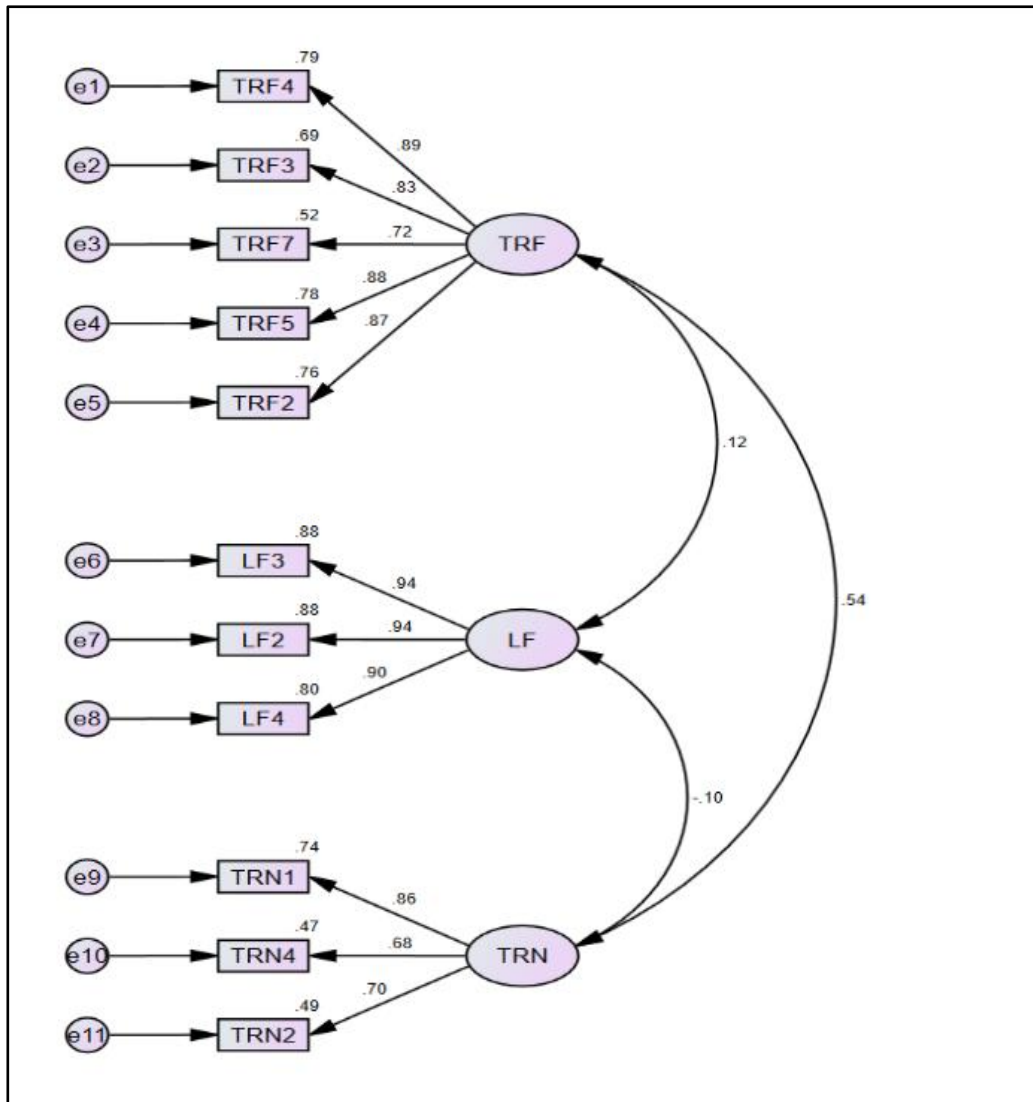


Fig.3.4 Factor structure of leadership styles scale with standardised loadings

The final draft of the “Teachers’ Perception of Their School Principal Leadership Style Questionnaire” consisted of 11 items distributed in the three dimensions- “transformational leadership, transactional leadership, laissez-faire leadership”-with the range of scores of individual participants on present scale from 11 to 55.

Table 3.15 Final distribution of items of “Teachers’ Perception of Their School Principal Leadership Style Questionnaire”

Sl no	Leadership Styles	No. of items	Range of scores
1	Transformational	5	5-25
2	Transactional	3	3-15
3	Laissez-faire	3	3-15

3.6 Description of “Copenhagen Burnout Inventory (CBI) by Tage S. Kristensen, Marianne Borritz, Ebba Villadsen, and Karl B. Christensen (2005)”

‘The Copenhagen burnout inventory’, developed by Kristensen, Borritz, Villadsen, and Christensen in 2005, is a widely used tool for assessing burnout across multiple dimensions. The Copenhagen burnout inventory is notable for its broad applicability, clear distinctions between burnout dimensions, and high reliability across different cultural and occupational contexts. Its design allows for more nuanced insights into how burnout manifests in various aspects of an individual's life, making it a valuable tool for both research and practical intervention in workplace health management.

The Copenhagen burnout inventory is made up of three parts that evaluate ‘personal burnout (PB)’, ‘work-related burnout (WRB)’, and ‘client (student) related burnout (SB)’.

The ‘personal burnout’ dimension refers to the degree of physical and mental fatigue or exhaustion an individual experiences. This component views burnout as a general, context-independent condition, intentionally avoiding differentiation between its physical and psychological manifestations.

The ‘work-related burnout’ dimension represents the level of physical and mental exhaustion that individuals attribute to the demands and pressures of their professional duties. This measure captures the subjective attribution of symptoms to one’s work environment, without attempting to establish objective causality. A comparative analysis of the ‘personal burnout’ and ‘work-related burnout’ scales enable the identification of individuals whose fatigue may arise from non-work-related factors, such as personal health concerns or familial demands.

The ‘student-related burnout’ dimension refers specifically to the extent of physical and psychological exhaustion that teachers associate with their interactions and responsibilities towards students. This scale captures the subjective sense of exhaustion arising from “people-oriented” work, highlighting the extent to which individuals believe their fatigue stems from direct interactions with students, rather than providing an objective assessment of those interactions’ effects.

The term “clients” is broadly defined to encompass groups such as patients, inmates, children, students, or residents. When applying the Copenhagen Burnout

Inventory, researchers are advised to substitute the term “client” with the most contextually appropriate designation for the target population (Schaufeli et al., 2009, as cited in Fiorilli et al., 2015). Accordingly, in the present study, the term “student” was used in place of “client,” as secondary school teachers primarily interact with students in their professional roles.

Table 3.16 Dimension wise items of CBI

Sr. No.	Dimensions	Item Numbers	Total Item
1	Personal burnout	1,2,3,4,5,6	6
2	Work-related burnout	7,8,9,10,13,14,15	7
3	Student-related burnout	11,12,16,17,18,19	6
		Total	19

3.6.1 Reliability and Validity

‘The Copenhagen burnout inventory’ is a 19-item questionnaire measuring burnout across three subscales: “personal burnout, work-related burnout, and client-related burnout” (Kristensen et al., 2005). The ‘personal burnout’ subscale (6 items, $\alpha = .87$) assesses general fatigue and exhaustion without attributing a specific source (e.g., "How often are you emotionally exhausted?"). The ‘work-related burnout’ subscale (7 items, $\alpha = .87$) measures exhaustion attributed to work (e.g., "Does your work frustrate you?"). The ‘client-related burnout’ subscale (6 items, $\alpha = .85$) evaluates burnout linked to working with clients (e.g., "Does it drain your energy to work with clients?"). The Copenhagen burnout inventory demonstrated strong internal consistency and divergent validity, as evidenced by its application in the PUMA study (Borritz et al., 2005, 2010; Bjorner et al., 2006).

3.6.2 Administration and scoring

The ‘Copenhagen burnout inventory’ consists of 19 items across three subscales, with most items (12) using a response set ranging from "always (100)" to "never (0)." One item on the ‘work-related burnout’ subscale is reverse scored, while other ‘work-related’ and ‘client-related’ burnout subscale items use a scale from "to a very high degree (100)" to "to a very low degree (0)."

For administration in the Indian context, the Copenhagen burnout inventory was administered to secondary school teachers. In accordance with the guidelines proposed by Boateng et al. (2018), which suggests an optimal ratio of 10 respondents per item, a

sample of 240 secondary school teachers was chosen for exploratory factor analysis. These participants, drawn from government and private schools in both rural and urban areas of Assam, provided a solid foundation for scale validation in the Indian context.

3.6.3 Validation of the CBI in Indian context

The Copenhagen burnout inventory has been translated into at least eight languages (Kristensen et al., 2005) and applied in diverse professional settings across countries such as Japan, Australia, Italy, and New Zealand, with groups including nurses, teachers, dentists, and prison personnel (Fiorilli et al., 2015; Milfont et al., 2008). Milfont et al. (2008) validated the Copenhagen burnout inventory among secondary school teachers in New Zealand, confirming its three-factor structure and demonstrating good construct validity with significant measurement weights and a well-fitting higher-order factor model. Similarly, Fiorilli et al. (2015) validated the Italian version of the ‘Copenhagen burnout inventory’ among kindergarten to high school teachers, further supporting the three-factor model.

Given the limited research on ‘teacher burnout’ in the Indian context using the Copenhagen burnout inventory, it was aimed to validate the instrument for Indian secondary school teachers. Exploratory factor analysis and confirmatory factor analysis were conducted to examine the scale’s validity, while Cronbach's alpha and Composite Reliability were computed to assess internal consistency.

3.6.4 Exploratory factor analysis of CBI

Exploratory factor analysis was applied using “principal component analysis with Varimax rotation and Kaiser Normalization method” to extract factors and three factors extracted namely, “personal burnout,” “work- related burnout,” and “student-related burnout” on secondary school teachers of Assam.

KMO and Bartlett's Test of Sphericity were conducted to assess data adequacy for factor analysis. The KMO value was 0.819, exceeding the minimum threshold of 0.60 for a good factor structure (Hutcheson & Sofroniou, 1999). Bartlett’s test indicated significant correlations among variables ($\chi^2 = 5674.704$, $df = 171$, $p = 0.00$), confirming the suitability of the data for confirmatory factor analysis. All items satisfied the validity criteria, with communalities exceeding 0.3 and anti-image correlations above 0.5, conforming to established benchmarks for item adequacy (Hair et al., 2006).

Table 3.17 KMO and Bartlett test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.819
Bartlett's Test	Approx. Chi Square	5674.704
	Df	171
	Sig.	.000

The total variance explained (Table 3.18) from principal component analysis revealed that the first three components had eigenvalues greater than 1, accounting for a cumulative variance of 74.30%, which exceeded the recommended threshold of 60% for adequate factor extraction (Hair et al., 2009). The first component explained 29.29% of the variance, the second 26.64%, and the third 18.37%. Together, these components captured majority of the data's variability, justifying their retention for further analysis.

Table 3.18 Total variance explained of CBI

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.565	29.290	29.290	5.565	29.290	29.290	5.073
2	5.061	26.639	55.929	5.061	26.639	55.929	4.543
3	3.491	18.373	74.302	3.491	18.373	74.302	4.501
4	.897	4.720	79.022				
5	.826	4.346	83.369				
6	.794	4.181	87.550				
7	.618	3.250	90.800				
8	.335	1.765	92.565				
9	.288	1.516	94.082				
10	.275	1.449	95.531				
11	.213	1.121	96.652				
12	.170	.894	97.546				
13	.136	.715	98.261				
14	.115	.607	98.868				
15	.105	.551	99.420				
16	.084	.443	99.863				
17	.018	.096	99.959				
18	.005	.026	99.985				
19	.003	.015	100.000				
<i>Extraction Method: Principal Component Analysis.</i>							

The pattern matrix from principal component analysis with varimax rotation and Kaiser normalization demonstrates a clear three-factor structure for 'student-related

burnout,’ ‘personal burnout,’ and ‘work-related burnout.’ Items for student-related burnout (SB1-SB6) loaded strongly on their factor, with values ranging from 0.828 to 0.967, exceeding the acceptable threshold of 0.40 for factor loadings (Hair et al., 2009). Similarly, personal burnout items (PB1-PB6) exhibited loadings between 0.523 and 0.944, with PB6 showing a relatively lower but still acceptable loading. Work-related burnout items (WRB1-WRB7) displayed loadings ranging from 0.668 to 0.867, meeting the benchmark for satisfactory item contribution. The analysis converged in four iterations, indicating a robust factor structure, and confirming the adequacy of the model for the dataset (Tabachnik & Fidell, 1996).

Table 3.19 Results of exploratory factor analysis for CBI

	Components		
	SB	PB	WRB
SB5	.967		
SB4	.960		
SB3	.958		
SB6	.928		
SB1	.852		
SB2	.828		
PB4		.944	
PB2		.932	
PB5		.924	
PB1		.900	
PB3		.865	
PB6		.523	
WRB2			.867
WRB3			.859
WRB7			.839
WRB1			.825
WRB4			.780
WRB5			.693
WRB6			.668
<i>Extraction Method: Principal Component Analysis.</i>			
<i>Rotation Method: Varimax with Kaiser Normalization.</i>			
<i>a. Rotation converged in 4 iterations.</i>			

Note: SB=Student-related burnout, PB=Personal Burnout, WRB=Work-related burnout

3.6.5 Results of confirmatory factor analysis of CBI

After conducting exploratory factor analysis, confirmatory factor analysis was performed to validate the factor structure of the Copenhagen burnout inventory in the Indian context, using a sample of 200 secondary school teachers from Assam.

Values of the model fit indices were found to be $p=0.020$, $RMSEA=0.065$, $CMIN/DF= 1.894$, $CFI= 0.934$, $SRMR=0.062$, $TLI=0.924$ as shown in the table 3.20. So RMSEA was a good fit indicator in this model (Kline, 2023). A model is deemed fit whenever 3-4 parameters in it meet minimum criteria (Hair et al., 2010). If the bulk of the fit indices are over the threshold values, it can be concluded that the conceptual model is confirmed by data (Whittaker et al., 2022)

Table 3.20 Measure of fitness indices for CBI

Measure Fit	Fit Indices	Measure Standard
PClose	0.020	> 0.05, Hu & Bentler, (1999)
CMIN/DF	1.894	The value of ratio of CMIN/df less than 3 (reasonably good indicator of model fit, Hoe 2008).
RMSEA	0.065	The values from .05 to .10 recommend acceptable fit (Browne & Cudeck, 1992; MacCallum et al., 1996).
CFI	0.934	Hair et al. (2010) suggested that, value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit (p. 647). Lima-Rodríguez et al. (2015) reported the value of CFI less than 0.90.
SRMR	0.062	< 0.08, Hu & Bentler, (1999)
TLI	0.924	TLI ranging from 0.85 and over 0.9 is a good fit (Hair et al., 2006; Kline, 2015)

The following table 3.21 presents the validity (both convergent and discriminant) of three constructs: ‘student-related burnout,’ ‘personal burnout,’ and ‘work-related burnout.’ For convergent validity, all constructs met the criteria: average variance extracted (AVE) exceeded the benchmark of 0.50, and composite reliability (CR) was greater than 0.70 and larger than AVE (Lamm et al., 2020). Specifically, student-related burnout (CR = 0.860, AVE = 0.508), personal burnout (CR = 0.886, AVE = 0.570), and work-related burnout (CR = 0.895, AVE = 0.551) showed strong internal consistency and sufficient variance explanation. For discriminant validity, the maximum shared variance (MSV) was less than AVE for all constructs, satisfying the criterion ($MSV < AVE$). Student-related burnout ($MSV = 0.001$), personal burnout

(MSV = 0.036), and work-related burnout (MSV = 0.036) confirmed that each construct is distinct from the others. These results indicated robust convergent and discriminant validity for the constructs.

Table 3.21 CR, AVE, MSV, MaxR(H) of each dimension of CBI and Square Root of the Average Variance Extracted and Correlations Matrix

	CR	AVE	MSV	MaxR(H)	SB	PB	WRB
SB	0.860	0.508	0.001	0.869	0.713		
PB	0.886	0.570	0.036	0.908	0.031	0.755	
WRB	0.895	0.551	0.036	0.904	-0.004	0.190*	0.742

Note: SB=Student-related burnout, PB=Personal Burnout, WRB=Work-related Burnout

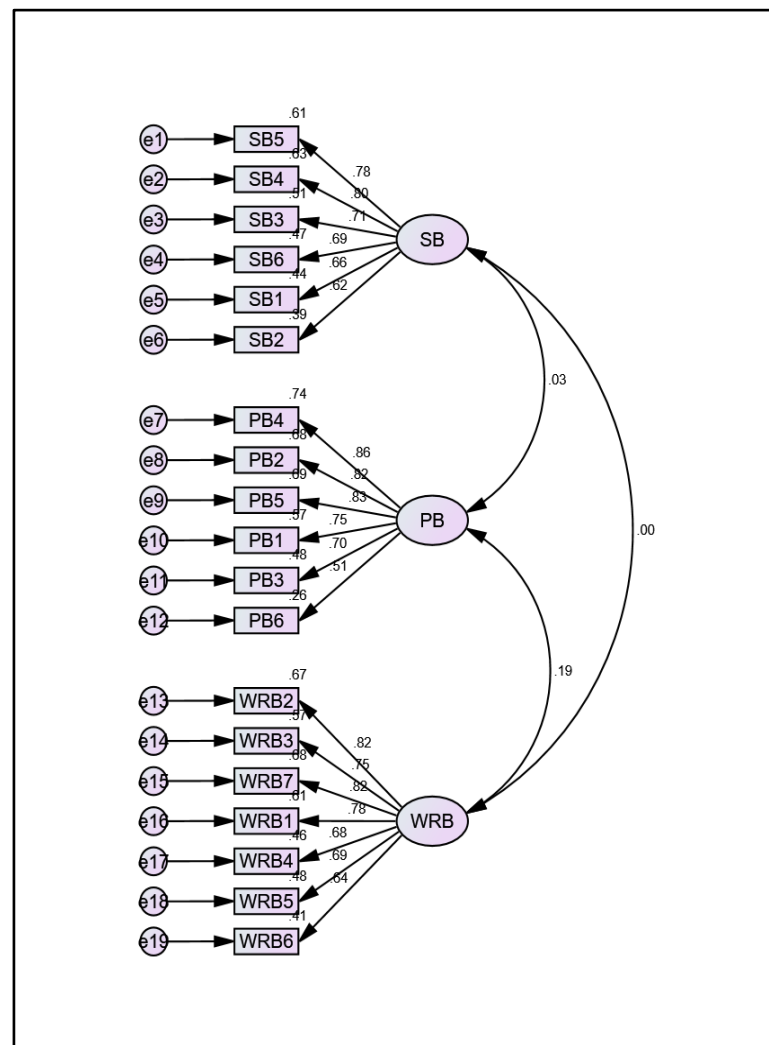


Figure 3.5: Factor structure of CBI with standardised loadings

The model, as shown in Figure 3.5, demonstrated that ‘student-related burnout,’ ‘personal burnout,’ and ‘work-related burnout’ were well measured by their respective items, with strong factor loadings across all constructs. Overall, the model supported the distinct yet related nature of these burnout dimensions.

3.6.6 Norms of interpreting the levels of CBI

To find the levels of “burnout of secondary school teachers,” the norms as in the below table 3.22 were used. These norms can be regarded as a reference point for interpreting the burnout scores.

Table 3.22 Norms for interpretation of raw scores of Burnout

Factors	PB	WRB	SB	B
Mean	58.32	47.04	72.74	59.37
SD	16.57	9.47	17.2	9.07
Normal range	25-100	29-68	29-100	36-89
Low score	47 and less	40 and less	61 and less	53 and less
Medium score	48-69	41-52	62-83	54-64
High score	70 and above	53 and above	84 and above	65 and above

Note: SB= ‘Student-related burnout,’ PB= ‘Personal Burnout,’ WRB= ‘Work-related Burnout,’ B= ‘Burnout’

To determine burnout levels among secondary school teachers, the sample was categorised into three levels using the Copenhagen burnout inventory guidelines. Teachers scoring at or above the mean plus 0.675 standard deviations ($M + 0.675SD$) were classified as having a high level of burnout, while those scoring at or below the mean minus 0.675 standard deviations ($M - 0.675SD$) were categorised as having a low level of burnout. Teachers with scores between $M - 0.675SD$ and $M + 0.675SD$ were classified as having a medium level of burnout.

The categorisation into high, medium, and low levels aligns with the CBI’s recommendation for determining burnout levels based on standardised scoring ranges (Kristensen et al., 2005). In this study, the normal range for burnout and its dimensions namely ‘personal burnout,’ ‘work-related burnout,’ ‘student-related burnout’ refers to the minimum and maximum observed scores within the particular dataset. The normal ranges-25 to 100 for ‘personal burnout’, 29 to 68 for ‘work-related burnout’, 29 to 100 for ‘student-related burnout’, and 36 to 89 for overall burnout-reflect the spread of responses among the participants in the sample.

Table 3.23: Mean and standard deviation of burnout and its dimensions

M and SD	PB	WRB	SB	B
Mean	58.32	47.04	72.74	59.37
Std. Deviation	16.57	9.47	17.2	9.07
Mean + 0.675SD	69.51	53.43	84.35	65.49
Mean - 0.675SD	47.13	40.65	61.13	53.25

Note: SB= 'Student-related burnout,' PB= 'Personal Burnout,' WRB= 'Work-related Burnout,' B= 'Burnout'

The table 3.23 displays the M and SD for burnout and its dimensions- including 'personal burnout,' 'work-related burnout,' and 'student-related burnout'. The mean and standard deviation for 'personal burnout', 'work-related burnout', 'student-related burnout', and overall 'burnout' were found to be 58.32 and 16.57, 47.04 and 9.47, 72.74 and 17.20, and 59.37 and 9.07, respectively.

Based on the classification criteria (mean $\pm$ 0.675 standard deviation), individuals scoring equal to or greater than 70 for 'personal burnout', 53 for 'work-related burnout', 84 for 'student-related burnout', and 65 for overall 'burnout' were categorised as having high levels of burnout. Those scoring equal to or less than 47 for 'personal burnout', 41 for 'work-related burnout', 61 for 'student-related burnout', and 53 for overall 'burnout' were categorised as having low levels of burnout. Scores falling between these ranges-47 to 70 for 'personal burnout', 40 to 53 for 'work-related burnout', 61 to 84 for 'student-related burnout', and 53 to 65 for overall 'burnout'-indicated medium levels of burnout.

3.7 Description of “Negative Acts Questionnaire-Revised (NAQ-R) by Stale Einarsen, Helge Hoel, and Guy Notelaers (2009)”

The 'Negative Acts Questionnaire-Revised,' developed by Stale Einarsen, Helge Hoel, and Guy Notelaers (2009), is the most extensively used measure for assessing workplace bullying. It was developed as an upgraded version of the original 'Negative Acts Questionnaire,' addressing concerns with its factor structure and several problematic items. The 'Negative Acts Questionnaire-Revised' reduced the initial 29 items, which addressed both personal and occupational bullying, to 22 (Nielsen et al., 2009).

The modified version focuses on three types of 'workplace bullying': 'work-related bullying,' 'person-related bullying,' and 'physically intimidating bullying'

(Einarsen et al., 2009). According to Makarem et al. (2018), the negative acts questionnaire-revised has been used in over 100 research studies spanning about 40 nations and varied work contexts. The ‘Bergen Bullying Research Group’ at the University of Bergen in Norway produced this instrument, which is freely available for research usage. The Negative Acts Questionnaire-Revised simply specifies harassing behaviours; the term bullying is not included at all. It addresses 22 types of harmful behaviour, ranging from subtle and indirect forms of negativity, such as gossip, to overt and forceful forms, such as physical abuse or threats.

3.7.1 Reliability and Validity

Einarsen et al. (2009) reported a Cronbach’s alpha value of 0.90 for the 22-item ‘Negative Acts Questionnaire-Revised (NAQ-R),’ indicating excellent internal consistency. However, the inter-factor correlations were notably high-0.96 between ‘person-related’ and ‘work-related bullying’, 0.89 between ‘work-related’ and ‘physically intimidating bullying’, and 0.83 between ‘person-related’ and ‘physically intimidating’ bullying. The authors suggested that while distinct dimensions of ‘workplace bullying’ can be identified, these dimensions often overlap considerably, reflecting the frequent co-occurrence of different forms of ‘bullying’ behaviour.

3.7.2 Administration and scoring of NAQ-R

To assess the frequency of exposure to bullying behaviours, a five-point Likert scale was employed, ranging from 1 (“Never”) to 5 (“Daily”). Participants were asked to indicate how often they had experienced each of the 22 negative acts described in the questionnaire, reflecting their workplace experiences over the previous six months (Einarsen et al., 2009).

The total scores on the questionnaire ranged from 23 to 115. Additionally, the instrument included a 23rd item presenting a clear definition of bullying, after which participants were asked to indicate the extent to which they believed they had personally experienced such behaviour, following the self-labelling approach. This final item functioned as an overall indicator of mobbing or workplace bullying

Scoring pattern followed in the ‘Negative Acts Questionnaire-Revised’ has been given in the Table 3.24 below.

Table 3.24 Scoring pattern of NAQ-R

Types of item	Number of items	Item Number	Scores
Positive	22	1-22	1: Never; 2: Now and then; 3: Monthly; 4: Weekly; 5: Daily
Positive	1	23	1: No; 2: Yes, but only rarely; 3: Yes, now and then; 4: Yes, several times per week; 5: Yes, almost daily

Table 3.25 Distribution of items of NAQ-R

Sr. No.	Dimensions	Item Numbers	Total Item
1	Work-related bullying	1,3,14,16,18,19,21	7
2	Person-related bullying	2,4,5,6,7,10,11,12,13,15,17,20	12
3	Physically intimidating bullying	8,9,22	3
		Total	22

3.7.3 Validation of NAQ-R in the Indian context

The Negative Acts Questionnaire-Revised has been standardised in several countries, including Japan, the UK, and the US, demonstrating strong internal consistency (Cronbach's alpha 0.88-0.90) and validity in terms of criteria and constructs (Nielsen et al., 2011). Studies in Norway and the UK confirmed its reliability, with Cronbach's alpha reaching 0.90 in a sample of 5,288 UK employees. The instrument's inclusion of latent class cluster analysis improved its ability to categorise employees based on bullying exposure (Einarsen et al., 2009). Given the prevalence of workplace bullying in India and the lack of detailed documentation (Gupta et al., 2017), the NAQ-R's psychometric properties among Indian teachers were examined to assess its validity and measure the frequency of bullying in schools. Following the guidelines suggested by Boateng et al. (2018), which recommends an optimal ratio of 10 respondents per item, a sample of 250 secondary school teachers was selected for conducting EFA. These participants, representing both government and private schools across rural and urban areas of Assam, ensured a strong basis for scale validation within the Indian context.

3.7.4 Exploratory factor analysis of NAQ-R

Exploratory factor analysis was conducted on data from secondary school teachers, with a Kaiser-Meyer-Olkin (KMO) value of 0.846, indicating sample adequacy, as values between 0.7 and 0.8 were considered satisfactory to exceptional (Hutcheson & Sofroniou, 1999). Bartlett's Test of Sphericity ($\chi^2 = 11876.419$, $df = 231$, $p < 0.05$) confirmed the suitability of the data for factor analysis. All items met validity criteria, with commonalities above 0.3 and anti-image correlations exceeding 0.5, aligning with established benchmarks for item adequacy (Hair et al., 2006).

The reliability analysis of the 'Negative Acts Questionnaire-Revised' across its three dimensions- 'work-related bullying,' 'person-related bullying,' and 'physically intimidating bullying'-demonstrated high internal consistency. The Cronbach's alpha values for 'work-related bullying', 'person-related bullying', and 'physically intimidating bullying' were 0.987, 0.976, and 0.965, respectively, with an overall Cronbach's alpha index of 0.951 for the scale, exceeding the acceptable benchmark of 0.70 for reliability (Nunnally & Bernstein, 1994). Corrected item-total correlations for individual items also met the threshold of 0.30 for adequate item contribution (Hair et al., 2006), with 'work-related bullying' ranging from 0.328 to 0.633, 'person-related bullying' from 0.715 to 0.846, and 'physically intimidating bullying' from 0.471 to 0.479. These results confirmed 'Negative acts questionnaire-revised' as a reliable instrument for measuring 'workplace bullying'.

Table 3.26: Reliability information of NAQ-R

Dimension	Items	Corrected Item- Total Correlation (Dimension-Wise)	Cronbach's alpha Index (Dimension- Wise)	Corrected Item- Total Correlation (22 items)	Cronbach's alpha Index (22 items Total)
WR	WR1	.916	.987	.330	.951
	WR2	.987		.511	
	WR3	.919		.328	
	WR4	.942		.629	
	WR5	.963		.633	
	WR6	.941		.631	
	WR7	.988		.512	
PR	PR1	.845	.976	.751	
	PR2	.922		.842	
	PR3	.823		.740	
	PR4	.908		.811	
	PR5	.913		.816	
	PR6	.809		.774	
	PR7	.887		.791	
	PR8	.802		.715	
	PR9	.868		.771	
	PR10	.934		.846	
	PR11	.904		.837	
	PR12	.831		.797	
PI	PI1	.929	.965	.471	
	PI2	.944		.479	
	PI3	.904		.474	

Note: WR= 'Work-related Bullying', PR= 'Person-related Bullying', PI= 'Physically Intimidating Bullying'

The rotated component matrix from principal component analysis with varimax rotation demonstrated a clear three-factor structure corresponding to 'person-related bullying,' 'work-related bullying,' and 'physically intimidating bullying.' Items under each component exhibited strong loadings, exceeding the benchmark of 0.40 for significant factor loadings (Hair et al., 2009). The 'person-related bullying' items (e.g., PR5 = 0.924, PR10 = 0.923) showed high loadings on Component 1, 'work-related bullying' items (e.g., WR7 = 0.988, WR2 = 0.987) load strongly on Component 2, and 'physically intimidating bullying' items (e.g., PI2 = 0.936, PI1 = 0.921) aligned with Component 3.

Table 3.27: Factor loadings of NAQ-R

	Component		
	1	2	3
PR5	.924		
PR10	.923		
PR2	.921		
PR4	.920		
PR7	.901		
PR9	.887		
PR11	.887		
PR1	.879		
PR3	.841		
PR8	.814		
PR12	.799		
PR6	.781		
WR7		.988	
WR2		.987	
WR3		.964	
WR1		.962	
WR5		.946	
WR4		.927	
WR6		.926	
PI2			.936
PI1			.921
PI3			.915
<i>Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.a. Rotation converged in 4 iterations.</i>			

Note: WR= 'Work-related Bullying', PR= 'Person-related Bullying', PI= 'Physically Intimidating Bullying'

The total variance explained (table 3.28) from principal component analysis demonstrated a robust three-factor structure. The first three components had eigenvalues greater than 1, explaining a cumulative 86.89% of the variance, which exceeded the recommended threshold of 60% for adequate factor extraction (Hair et al., 2009). Component 1 accounted for 50.50% of the variance, Component 2 added 26.60%, and Component 3 contributed 9.78%. This indicated that these three components captured the majority of the data's variability, justifying their retention. Components beyond the third had eigenvalues below 1 and contributed minimally to the explained variance, aligning with Kaiser's criterion for factor retention (Hair et al.,

2006). These results confirmed the strong explanatory power and adequacy of the model.

Table 3.28: Total variance explained of NAQ-R

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.110	50.502	50.502	11.110	50.502	50.502	9.578
2	5.852	26.602	77.104	5.852	26.602	77.104	6.539
3	2.152	9.782	86.886	2.152	9.782	86.886	2.999
4	.675	3.067	89.953				
5	.464	2.108	92.061				
6	.365	1.661	93.722				
7	.322	1.465	95.187				
8	.233	1.060	96.246				
9	.191	.870	97.116				
10	.139	.631	97.747				
11	.116	.525	98.273				
12	.086	.392	98.665				
13	.068	.311	98.976				
14	.059	.266	99.242				
15	.055	.251	99.493				
16	.036	.165	99.658				
17	.025	.114	99.772				
18	.021	.096	99.867				
19	.016	.075	99.942				
20	.009	.042	99.984				
21	.003	.013	99.997				
22	.001	.003	100.000				
<i>Extraction Method: Principal Component Analysis</i>							

3.7.5 Results of Confirmatory factor analysis of NAQ-R

Using Kaiser normalization and varimax rotation, exploratory factor analysis identified three components: ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying’. Confirmatory factor analysis was conducted on another sample from 250 secondary school teachers to confirm the factor structure and

assess the model's goodness of fit. Goodness-of-fit indices included CMIN/DF = 1.813, CFI = 0.917, SRMR = 0.060, and RMSEA = 0.065, with PClose = 0.011. These values met acceptable thresholds for fit, including CFI > 0.90 and RMSEA < 0.08 (Byrne, 2001), confirming the model's validity and a good data-to-model fit.

Table 3.29 Measure of fitness indices for NAQ-R

Measure Fit	Fit Indices	Measure Standard
PClose	0.011	> 0.05, Hu & Bentler, (1999)
CMIN/DF	1.831	The value of ratio of CMIN/df less than 3 (reasonably good indicator of model fit, Hoe 2008).
RMSEA	0.065	The values from .05 to .10 recommend acceptable fit (Browne & Cudeck, 1992; MacCallum et al.,1996).
CFI	0.917	Hair et al. (2010) suggested that, value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit (p. 647). Lima-Rodríguez et al. (2015) reported the value of CFI less than 0.90.
SRMR	0.060	< 0.08, Hu & Bentler, (1999)
TLI	.906	TLI ranging from 0.85 and over 0.9 is a good fit (Hair et al., 2006; Kline, 2015)

Table 3.30: CR, AVE, MSV, MaxR(H) of each dimension of NAQ-R and Square Root of the Average Variance Extracted and Correlations Matrix

	CR	AVE	MSV	MaxR(H)	PR	WR	PI
PR	0.923	0.502	0.021	0.927	0.708		
WR	0.881	0.514	0.021	0.883	-0.144†	0.717	
PI	0.751	0.505	0.008	0.770	0.071	0.088	0.711

Note: WR= 'Work-related Bullying', PR= 'Person-related Bullying', PI= 'Physically Intimidating Bullying'

The validity analysis (Table 3.30) of the constructs- 'person-related bullying,' 'work-related bullying,' and 'physically intimidating bullying'-demonstrated strong convergent and discriminant validity. Convergent validity was confirmed as composite reliability (CR) values exceeded the benchmark of 0.70, and average variance extracted (AVE) values were greater than 0.50 (Fornell & Larcker, 1981). Specifically, CR values

were 0.923, 0.881, and 0.751, respectively, with corresponding AVE values of 0.502, 0.514, and 0.505.

Discriminant validity was supported as the maximum shared variance (MSV) for each construct was lower than its AVE. Correlations between constructs remained low, with the square root of AVE (bold diagonal values: ‘person-related bullying’ = 0.708, ‘work-related bullying’ = 0.717, ‘physically intimidating bullying’ = 0.711) exceeding the inter-construct correlations, further confirming discriminant validity (Hu et al., 1999). These findings validated the distinctiveness and reliability of the constructs.

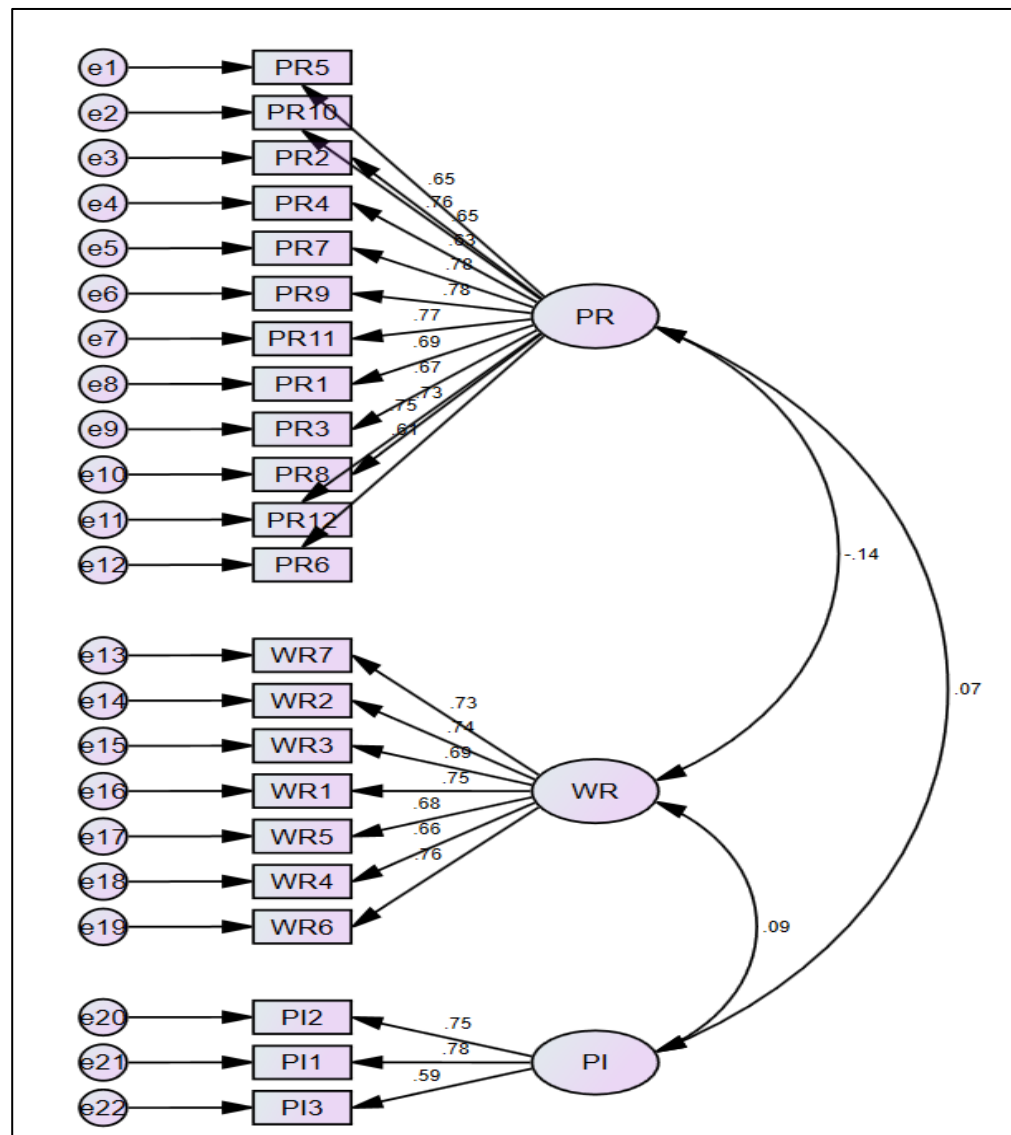


Figure -3.6: 3-factor structure of NAQ-R with standardised loadings

3.7.6 Norms for interpretation

To find the levels of workplace bullying of secondary school teachers, mean of the raw scores of the NAQ-R and its dimensions was calculated.

Table 3.31 shows norms for interpretation of raw scores. These norms can be regarded as a reference point for interpreting workplace bullying scores.

Table 3.31: Norms for interpretation of raw scores of NAQ-R

Factors	PR	WR	PI	WB (TOTAL)
Mean	30.23	20.25	8.20	58.68
SD	13.587	8.451	3.458	23.099
Normal range	12-60	7-35	3-15	22-98
Low score	21 and below	15 and below	6 and below	43 and below
Medium score	22-38	16-25	7-10	44-73
High score	39 and above	26 and above	11 and above	74 and above

Note: WR= 'Work-related Bullying', PR= 'Person-related Bullying,' PI= 'Physically Intimidating Bullying,' WB= 'Workplace Bullying'

To determine the levels of workplace bullying among secondary school teachers, the sample was categorised into three distinct levels based on the guidelines of the NAQ-R (Gupta et al., 2017). Teachers who scored at or above the mean plus 0.675 standard deviations ($M + 0.675SD$) were classified as severely bullied, while those who scored at or below the mean minus 0.675 standard deviations ($M - 0.675SD$) were categorised as not bullied. Teachers with scores falling between $M - 0.675SD$ and $M + 0.675SD$ were identified as sometimes bullied. This classification was consistently applied across all dimensions of workplace bullying-‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying’-in alignment with the standardized assessment approach developed by Einarsen et al. (2009) for measuring ‘workplace bullying’ experiences among teachers.

The table 3.32 displays the M and SD for ‘workplace bullying’ and its dimensions - ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying’ with mean scores of 30.23, 20.25, 8.20, and 58.68, and standard deviations of 13.587, 8.451, 3.458, and 23.099, respectively. In this study, the normal range for ‘workplace bullying’ and its dimensions- ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying’-refers to the minimum and

maximum observed scores within the dataset. The normal ranges-12 to 60 for ‘person-related bullying’, 7 to 35 for ‘work-related bullying’, 3 to 15 for ‘physically intimidating bullying’, and 22 to 98 for overall ‘workplace bullying’-reflect the spread of responses among the participants in the sample.

Table 3.32: Mean and standard deviation of workplace bullying and its dimensions

M and SD	PR	WR	PI	WB
Mean	30.23	20.25	8.20	58.68
Std. Deviation	13.587	8.451	3.458	23.099
Mean +.675SD	39.40	25.95	10.53	74.27
Mean -.675SD	21.05	14.54	5.86	43.08

Based on the classification criteria of the mean plus or minus 0.675 standard deviations, teachers who scored 39 or above on person-related bullying, 26 or above on work-related bullying, 11 or above on physically intimidating bullying, and 74 or above on overall workplace bullying were categorised as victims of bullying. Those who scored 21 or below on ‘person-related bullying’, 15 or below on ‘work-related bullying’, 6 or below on ‘physically intimidating bullying’, and 43 or below on overall ‘workplace bullying’ were considered not bullied; while scores that fell between 22 and 38 for ‘person-related bullying’, 16 and 25 for ‘work-related bullying’, 7 and 10 for ‘physically intimidating bullying’, and 44 and 73 for overall ‘workplace bullying’ indicated that individuals were sometimes bullied. This standardised approach provided a clear and practical method to assess the severity of workplace bullying across different dimensions.

3.8 Description of “Psychological Empowerment Scale (PES) by Gretchen M. Spreitzer (1995)”

Defining ‘psychological empowerment’ as a desirable construct exemplified by four dimensions, including ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’; ‘the Psychological Empowerment Scale (PES)’ was developed by Spreitzer (1995) to measure the phenomenon of empowerment. Dimensions of the PES as given by Spreitzer (1995) are as follows:

- a) Meaning (M): "The value of a work goal or purpose, judged in relation to an individual's own ideals or standards."

- b) Competence (C): "An individual's belief in his or her capability to perform activities with skill."
- c) Self-determination (SD): "An individual's sense of having choice in initiating and regulating actions."
- d) Impact (I): "The degree to which an individual can influence strategic, administrative, or operating outcomes at work."

3.8.1 Reliability and validity

Spreitzer evaluated the reliability and validity of the scale. The Cronbach's alpha reliability coefficient for the overall empowerment construct was 0.72, whereas it was 0.62 for two distinct groups. The study assessed test-retest reliability, revealing an average level of stability. A second-order confirmatory factor analysis was performed, yielding an excellent fit for one group and a modest fit for the other group. The four factors had strong correlations with one another in both populations (Spreitzer, 1995).

3.8.2 Administration and scoring of PES

The 12-item PES encompasses four dimensions: 'meaning,' 'competence,' 'self-determination,' and 'impact', utilising a seven-point Likert scale with responses from 1 (strongly disagree) to 7 (strongly agree). A high psychological empowerment scale score signifies an individual's self-assurance in their capabilities. Respondents were directed to select the statement that best reflects their "agreement or disagreement" with each assertion.

Scoring pattern followed in the PES is as given in the Table 3.33 below.

Table 3.33 Scoring pattern of PES

Types of item	Number of items	Item Number	Scores
Positive	12	1-12	VSD=1, SD =2, D=3 N=4, A=5, D=6 and SD=7.

Note: "VSD= Very Strongly Disagree, SD= Strongly Disagree, D= Disagree, N=Neutral A=Agree SA=Strongly Agree, VSA=Very Strongly Agree"

Table 3.34 Distribution of items of PES

Sl. No.	Dimensions	Item Numbers	Total Item
1	Meaning	2, 5 & 10	3
2	Competence	1, 9 & 12	3
3	Self - Determination	3, 7 & 8	3
4	Impact	4, 6 & 11	3

3.8.3 Validation of PES in the Indian context

The psychological empowerment scale has been translated and tested across various cultures, including Turkey, the United States, China, Spain, and Sweden, consistently supporting Spreitzer's original four-factor structure. Since population characteristics can influence how a tool evaluates a construct, it was necessary to validate the psychological empowerment scale for secondary school teachers in Assam. Validation involved exploratory factor analysis, confirmatory factor analysis, and reliability testing through Cronbach's alpha to measure internal consistency, along with construct reliability and norm creation in the Indian context. Following the rule of thumb of 10 participants per item, the study included a sample size of 249 teachers for exploratory factor analysis, adhering to general recommendations of at least 50–100 participants for validation research (Boateng et al., 2018).

3.8.4 Exploratory factor analysis of PES

The KMO value for the psychological empowerment scale was 0.781, indicating adequate sample size for factor analysis (Hutcheson & Sofroniou, 1999). Bartlett's Test of Sphericity was significant ($\chi^2 = 3605.655$, $df = 66$, $p < 0.05$), confirming the suitability of the data for multivariate analysis. All items demonstrated commonalities > 0.3 and anti-image correlations > 0.5 , meeting the thresholds for inclusion in factor analysis. These metrics validate the adequacy of the sample and data for the analysis.

The reliability analysis of the psychological empowerment scale demonstrated strong internal consistency across its four dimensions: self-determination, competence, impact, and meaning. The dimension-wise Cronbach's alpha values were 0.969 for self-determination, 0.976 for competence, 0.946 for impact, and 0.893 for meaning, all exceeding the benchmark of 0.70 for acceptable reliability (Nunnally & Bernstein,

1994, as cited in Danner, 2016). The corrected item-total correlations also met the threshold of 0.30 (Hair et al., 2009), with values ranging from 0.401 to 0.672 for impact, 0.558 to 0.586 for self-determination, 0.626 to 0.672 for competence, and 0.331 to 0.672 for meaning. The overall reliability for the 12-item scale, reflected in a Cronbach's alpha of 0.850, further supported its robustness and reliability for measuring psychological empowerment.

Table: 3.35 Reliability of PES

Dimension	Items	Corrected Item-Total Correlation (Dimension Wise)	Cronbach's alpha Index (Dimension Wise)	Corrected Item-Total Correlation	Cronbach's alpha Index (12 items)
SD	SD1	.919	.969	.558	0.850
	SD2	.952		.583	
	SD3	.919		.586	
C	C1	.933	.976	.626	
	C2	.939		.661	
	C3	.982		.672	
I	I1	.891	.946	.401	
	I2	.932		.400	
	I3	.842		.331	
M	M1	.812	.893	.421	
	M2	.810		.414	
	M3	.780		.672	

Note: SD=Self-Determination, C=Competence, I=Impact, M=Meaning

The factor loadings, means, and standard deviations for the psychological empowerment scale indicated strong construct validity across its dimensions. All items showed high factor loadings, exceeding the benchmark of 0.40 for significance (Hair et al., 2009), with self-determination items ranging from 0.944 to 0.954, competence items from 0.921 to 0.938, impact items from 0.926 to 0.963, and meaning items from 0.840 to 0.905.

Table 3.36: Descriptive information of PES and factor loadings

	Items	Mean	Standard Deviation	Factor loading			
				SD	C	I	M
SD	SD1	4.31	0.705	0.949			
	SD2	4.37	0.778	0.954			
	SD3	4.31	0.750	0.944			
C	C1	5.44	0.676		0.929		
	C2	5.47	0.730		0.921		
	C3	5.50	0.763		0.938		
I	I1	4.45	0.792			0.947	
	I2	4.39	0.727			0.963	
	I3	4.44	0.760			0.926	
M	M1	6.29	0.625				0.897
	M2	5.90	0.779				0.905
	M3	5.86	0.810				0.840

Note: SD=Self-Determination, C=Competence, I=Impact, M=Meaning

The total variance explained table 3.36 from principal component analysis indicated a robust four-component structure, with eigenvalues greater than 1 for the first four components, cumulatively explaining 91.59% of the total variance, which exceeded the benchmark of 60% for adequate factor retention (Hair et al., 2009). Component 1 accounted for 39.77% of the variance, Component 2 added 24.36%, Component 3 contributed 17.06%, and Component 4 explained 10.40%. The rotation sums of squared loadings further optimized the distribution, with the four components collectively retaining 91.59% of the variance. Components beyond the fourth had eigenvalues below 1, contributing minimally to the explained variance, aligning with Kaiser's criterion for factor retention (Hair et al., 2009). These results confirmed the adequacy of the four-factor model.

Table 3.37 Total Variance Explained of the PES

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.77	39.766	39.766	4.77	39.766	39.766	2.912	24.269	24.269
2	2.92	24.359	64.124	2.92	24.359	64.124	2.839	23.657	47.926
3	2.05	17.063	81.187	2.05	17.063	81.187	2.72	22.668	70.594
4	1.25	10.402	91.589	1.25	10.402	91.589	2.519	20.995	91.589
5	0.24	1.994	93.583						
6	0.22	1.825	95.408						
7	0.19	1.589	96.996						
8	0.11	0.883	97.88						
9	0.10	0.832	98.712						
10	0.07	0.604	99.316						
11	0.06	0.499	99.815						
12	0.02	0.185	100						

3.8.5 Results of confirmatory factor analysis

Following exploratory factor analysis, which employed Kaiser normalization and varimax rotation, four components-self-determination, competence, impact, and meaning-were identified. To validate this structure, confirmatory factor analysis was conducted using data from a cleaned sample of 249 secondary school teachers.

Table 3.38 Measure of fitness indices for PES

Measure Fit	Fit Indices	Measure Standard
PClose	0.503	> 0.05, Hu & Bentler, (1999)
CMIN/DF	1.600	The value of ratio of CMIN/df less than 3 (reasonably good indicator of model fit, Hoe 2008).
RMSEA	0.049	The values from .05 to .10 recommend acceptable fit (Browne & Cudeck, 1992; MacCallum et al.,1996).
CFI	0.993	Hair et al. (2010) suggested that, value of CFI > 0.85 is acceptable and the value of CFI > 0.90 is considered a better fit (p. 647). Lima-Rodríguez et al. (2015) reported the value of CFI less than 0.90.
SRMR	0.032	< 0.08, Hu & Bentler, (1999)
TLI	0.991	TLI ranging from 0.85 and over 0.9 is a good fit (Hair et al., 2006; Kline, 2015)

The model's goodness-of-fit was evaluated using key indices: CMIN/DF = 1.600 (< 3), CFI = 0.993 (> 0.95), SRMR = 0.032 (< 0.08), RMSEA = 0.049 (< 0.06), and TLI = 0.991 (> 0.95), with a P Close value of 0.503. The values, as shown in Table 3.37, exceeded the acceptable thresholds for a well-fitting model, as defined by benchmarks for CFI and TLI > 0.90 and RMSEA between 0.05 and 0.10 (Tabachnik et al., 2012). The results confirmed excellent model fit and strong factorial validity.

The validity analysis of the 'psychological empowerment scale' dimensions demonstrated strong convergent and discriminant validity (Table 3.39). Convergent validity is supported as composite reliability (CR) values exceeded 0.70, and average variance extracted (AVE) values were above the 0.50 threshold (Fornell & Larcker, 1981). CR values ranged from 0.934 to 0.982, with AVE values between 0.826 and 0.949. Discriminant validity was evident as the maximum shared variance (MSV) for each construct was lower than its respective AVE, and the square root of AVE (bold diagonal values: SD = 0.956, C = 0.968, I = 0.909, M = 0.974) exceeded the inter-construct correlations (Hu et al., 1999). These results confirmed that the scale is reliable and that the constructs are distinct and valid for measuring psychological empowerment.

Table-3.39: CR, AVE, MSV, MaxR(H) of each dimension of PES and Square Root of the Average Variance Extracted (AVE) and Correlations Matrix

Dimensions	CR	AVE	MSV	MaxR(H)	SD	C	I	M
SD	0.970	0.914	0.109	0.976	0.956			
C	0.978	0.936	0.195	1.032	0.330	0.968		
I	0.934	0.826	0.058	0.979	0.240	0.100	0.909	
M	0.982	0.949	0.195	0.984	0.081	0.441	0.023	0.974

Note: SD=Self-Determination, C=Competence, I=Impact, M=Meaning

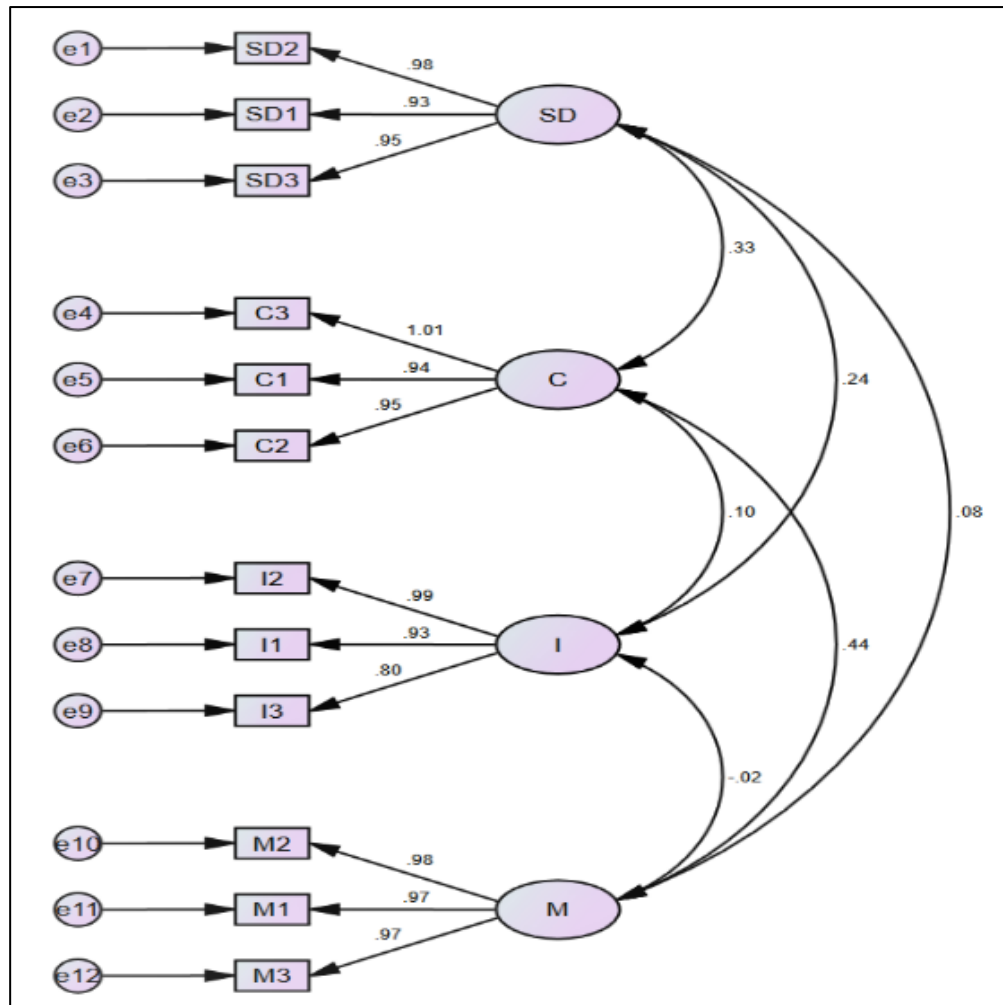


Figure: 3.7-Factor structure of PES

The confirmatory factor analysis model evaluated four latent variables-‘self-determination,’ ‘competence,’ ‘impact,’ and ‘meaning’-each measured by three items with high factor loadings (0.93 to 0.98), demonstrating strong convergent validity. Correlations between the latent variables were moderate to low, such as self-determination and competence ($r = 0.33$), self-determination and impact ($r = 0.10$), and self-determination and meaning ($r = 0.08$). The highest correlation was between competence and impact ($r = 0.44$), while the correlation between impact and meaning was nearly negligible ($r = -0.02$). These results confirmed the constructs' distinctiveness, supporting discriminant validity.

Overall, the model demonstrated a good fit, with high factor loadings and distinct relationships between constructs, confirming that each dimension is reliably

and validly measured by its respective items, and that these dimensions are unique but moderately correlated.

3.8.6 Norms for interpretation

Table 3.40 shows norms for interpretation of raw scores. These norms can be regarded as a reference point for interpreting the psychological empowerment scores.

Table 3.40: Norms for interpretation of raw scores of PES

M and SD	M	I	C	SD	PE
Mean	17.90	13.27	14.70	14.70	60.72
Std. Deviation	2.16	2.14	2.74	2.74	5.47
Mean +.675SD	19.36	14.72	16.55	16.55	64.41
Mean -.675SD	16.44	11.82	12.85	12.85	57.02

Note: SD=Self-Determination, C=Competence, I=Impact, M=Meaning, PE=Psychological Empowerment

To determine levels of psychological empowerment among secondary school teachers, the sample was categorised into three levels using the guidelines from Spreitzer's Psychological Empowerment Scale. Teachers scoring at or above the mean plus 0.675 standard deviations ($M + 0.675SD$) were classified as having a high level of psychological empowerment, while those scoring at or below the mean minus 0.675 standard deviations ($M - 0.675SD$) were categorised as having a low level of psychological empowerment. Teachers with scores between $M - 0.675SD$ and $M + 0.675SD$ were classified as having a medium level of psychological empowerment. This categorization was applied across 'psychological empowerment' and its dimensions- 'meaning,' 'competence,' 'self-determination,' and 'impact,' adhering to Spreitzer's (1995) standardised approach for measuring psychological empowerment levels in individuals.

The table 3.40 displays the mean and standard deviation for the dimensions of 'psychological empowerment', including "meaning, impact, competence, and self-determination". The mean and standard deviation for these dimensions were found to be 17.90 and 2.16 for meaning, 13.27 and 2.15 for impact, 14.70 and 2.74 for both competence and self-determination, and 60.72 and 5.47 for overall psychological empowerment.

Table 3.41: Mean and standard deviation of psychological empowerment scale and its dimension

Factors	M	I	C	SD	PE
Mean	17.90	13.27	14.70	14.70	60.72
Std Deviation	2.16	2.14	2.74	2.74	5.473
Normal range	15-21	9-18	9-21	9-21	50-76
Low score	16 and less	12 and less	13 and below	13 and below	57 and below
Medium score	17-18	13-14	14-16	14-16	58-63
High score	19 and above	15 and above	17 and above	17 and above	64 and above

Note: SD=Self-Determination, C=Competence, I=Impact, M=Meaning, PE=Psychological Empowerment

In this study, the normal range for ‘psychological empowerment’ and its dimensions- ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’-refers to the minimum and maximum observed scores within the dataset. The normal ranges-15 to 21 for meaning, 9 to 21 for competence and self-determination, 9 to 18 for impact, and 50 to 76 for overall psychological empowerment-reflect the spread of responses among the participants in the sample.

As shown in Table 3.41, and based on the classification criteria of the mean plus or minus 0.675 standard deviations, teachers who scored 64 or above, 19 or above, 15 or above, 17 or above, and 17 or above on the ‘psychological empowerment scale’ and its dimensions of ‘meaning,’ ‘impact,’ ‘competence,’ and ‘self-determination’ respectively were categorised as having high levels of psychological empowerment. Teachers who scored 57 or below, 16 or below, 12 or below, 13 or below, and 13 or below on the overall scale and respective dimensions were categorised as having low levels. Scores between 58 and 63, 17 and 18, 13 and 14, 14 and 16, and 14 and 16 respectively indicated moderate levels. This classification provided a clear and structured approach to assess psychological empowerment among teachers across all dimensions.

3.9 Procedure of Data Collection

The researcher himself collected the data for this study. Necessary authorisation for data collection was taken from the heads of the institutes from teachers employed in secondary schools of Assam affiliated to/recognised by the Board of Secondary Education, Assam. The teachers were apprised of the study's objective, and all their enquiries concerning the completion of personal information and the method of

providing responses in the questionnaire and scales were addressed. The participants were urged to furnish honest and precise answers. Ethical standards were maintained by ensuring voluntary participation and anonymity of responses.

The study necessitated the inclusion of secondary school teachers from both government and private institutions. The data collection process required 6-7 months. Subsequently, all four instruments- “Teachers’ Perception of Their School Principal Leadership Style Questionnaire,” “Copenhagen Burnout Inventory,” “Negative Acts Questionnaire-Revised,” and “Psychological Empowerment Scale”-were administered to the selected teachers. The comprehensive data was gathered from all schools, both government and private, within each selected district namely Dibrugarh and Tinsukia in the Upper Assam region. The purpose of the study was clearly communicated to the participating teachers, and their concerns regarding the disclosure of personal information or responses to the questionnaires and scales were duly addressed. Consequently, data pertaining to the study variables were collected effectively and without major difficulty.

3.9.1 Statistical Techniques

Most research studies produce a large amount of raw data, which needs to be condensed into a more manageable form for easy interpretation and analysis. Generally, this is done using two main types of statistics: ‘descriptive statistics’ and ‘inferential statistics.’ For this study, the data was analysed using software tools such as IBM SPSS-23 and IBM AMOS-23. The following statistical methods were employed during the analysis:

(a) Descriptive statistical measures such as mean, standard deviation were utilised to explore the characteristics of the data. Additionally, percentage analysis was conducted on the respondents' scores to determine the psychological empowerment level of teachers. These levels were categorised into groups such as ‘high,’ ‘moderate,’ and ‘low.’ For bullying, the responses were classified as severely bullied, not bullied, and sometimes bullied, while for burnout, the results were grouped into high, moderate, and low.

(b) Inferential statistics aimed to make conclusions about a population based on sample observations, and is the central goal of inferential analysis. t-test was conducted to examine significant differences between the means for variables such as perceived

leadership styles, burnout, psychological empowerment, and workplace bullying among secondary school teachers across different groups based on gender, locality, and type of school. Additionally, one-way ANOVA was used to assess differences in the means of perceived leadership styles, teacher burnout, workplace bullying, and psychological empowerment with respect to varying levels of teaching experience. To further explore the association between experience and exposure to workplace bullying, a chi-square test of independence was carried out to determine whether the frequency of workplace bullying significantly differed across categories of gender, locality, school type, and teaching experience.

(c) To analyse the relationship of burnout of secondary school teachers, perceived leadership styles, psychological empowerment, and workplace bullying, Karl Pearson's coefficient of correlation was calculated.

(d) Mediation analysis was applied through PROCESS Macro (Hayes, 2018) in SPSS 23 and AMOS 23 version for analysing the role of workplace bullying between perceived leadership styles and burnout among teachers.

(e) Moderation analysis and moderated mediation analysis was applied through PROCESS Macro (Hayes, 2018) in SPSS 23 and AMOS 23 version for analysing the role of psychological empowerment between perceived leadership styles, burnout and workplace bullying among teachers.

Graphical representation of data

The graphical depiction of a data set makes it easier to understand. When a figure is well-designed, the data is usually easier to read and analyse. As a result, whenever possible and necessary, data was displayed graphically.

CHAPTER – IV

ANALYSIS AND INTERPRETATION

The previous chapter delved into the research methodology, which covered essential components such as sampling techniques, the process of data collection, and the tools used for measurement, including the creation of norms. In contrast, the current chapter emphasises the analysis and interpretation of the gathered data. "Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. Various analytic procedures provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data," according to the Office for Research Integrity (2023). Without proper analysis, data remains inert and lacks meaning. Therefore, the statistical treatment of the data is central to this chapter, aiming to fulfil the study's objectives through a detailed examination of the results.

Koul (2009) noted that data analysis involves meticulously studying the organized data to uncover underlying facts, requiring the researcher to approach the process with flexibility and an open mind. According to Kumar (2018), data analysis is one of the most complex stages in research, demanding both skill and sound judgment from the researcher. Through careful interpretation, the researcher can identify patterns, relationships, and distinctions that contribute to a deeper understanding of the findings. In this study, both inferential and descriptive statistics were utilised to provide a comprehensive evaluation of the data in relation to the research hypotheses.

4.1 DATA CLEANING

In quantitative research, even with precise sampling, methodology, design, and instrument selection, the possibility of errors remains. Proper data screening is crucial before applying any parametric test to ensure accuracy, particularly in addressing missing values and outliers. According to Osborne (2012), data screening is an essential step in the analysis process, helping researchers identify and handle anomalies in the dataset. By doing so, researchers can enhance the validity and reliability of their findings. Data cleaning is not just a procedural step but a necessary part of the research process to ensure the integrity of the results, Osborne (2012).

In the current study, 470 questionnaires were distributed and received from government and private secondary school teachers. After careful inspection of data, 14 questionnaires were excluded due to incomplete responses, unengaged responses, and missing values, which could introduce bias if included. The remaining 456 valid responses were entered into SPSS for data cleaning. As part of the cleaning process, the outliers were identified and removed using Mahalanobis Distance, a statistical measure used to detect multivariate outliers by assessing the distance of each case from the overall data distribution. This method ensures that extreme cases, which could distort statistical analyses, are excluded (Cabana, et al., 2021). After applying Mahalanobis Distance, 6 additional cases were removed, leaving a final dataset of 450 respondents. The final response rate of 95.74% exceeded the acceptable threshold for survey studies, which is generally around 30% (Nulty, 2008), confirming that the dataset was suitable for subsequent statistical analyses.

4.2 DESCRIPTIVE ANALYSIS

Over the years, various tests for assessing normality have gained acceptance (Razali & Wah, 2011). Among these, the Shapiro-Wilk test is widely regarded as a powerful test for detecting deviations from normality, particularly in small samples (Razali & Wah, 2011; Yap & Sim, 2011). Nevertheless, some studies suggested that z-scores of skewness and kurtosis may outperform the Shapiro-Wilk test in detecting non-normality for certain distributions, especially in larger datasets (Ghasemi & Zahediasl, 2012). While the Shapiro-Wilk and Kolmogorov-Smirnov tests are commonly used for small to medium sample sizes ($n < 300$), they tend to be overly sensitive with larger datasets (Razali & Wah, 2011). An alternative approach for determining normality involves examining the skewness (Sk) and kurtosis (Ku) of the distribution, which can be effective across various sample sizes (Ghasemi & Zahediasl, 2012).

For skewness and kurtosis values, George and Mallery (2024) suggested that values between -2 and +2 are generally acceptable indicators of normality. Similarly, Kline (2023) argued that skewness between -2 and +2 and kurtosis between -7 and +7 are indicative of a normal distribution. Kline (2023) suggested that skewness values greater than 3 and kurtosis values above 10 may signal potential issues with the data's distribution, while extreme values (e.g., kurtosis > 20) can represent more severe problems. However, in large samples ($n > 200$), even substantial deviations from

normality in skewness and kurtosis often do not significantly affect the results of statistical tests Kline (2023). Additionally, parametric tests like regression are robust against normality violations in large samples (Lumley et al.,2002).

4.2.1 Descriptive analysis of leadership styles of principals as perceived by secondary school teachers

The collected data has been analysed to compute descriptive statistics for the variable measuring perceived leadership style of principals. The results have been presented in Table 4.2.1.

Table 4.2.1 Descriptive statistics of Leadership Styles of Principals as perceived by teachers

Perceived Leadership Styles										
Dimension	N	M	MD	SD	Sk	SE (Sk)	Z (Sk)	Ku	SE (Ku)	Z (Ku)
TRF	450	15.17	15.17	3.327	0.13	0.115	1.130	-0.896	0.23	-3.896
TRN	450	11.89	11.89	2.808	-0.496	0.115	-4.313	-0.809	0.23	-3.517
LF	450	11.09	11.09	2.997	-0.355	0.115	-3.087	-0.881	0.23	-3.830

Note: N=number of respondents, M=mean, MD= Median SD= standard deviation, Sk=skewness, Z(skewness), Ku=kurtosis, SE(Sk)=standard error of skewness, SE(Ku)= standard error of kurtosis, Z(kurtosis), TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership.

The above Table 4.2.1 presents the mean, median, standard deviation, skewness, standard error of skewness, Z (Skewness), kurtosis, standard error of kurtosis, and Z (Kurtosis) for leadership styles of principals viz., transformational, transactional, and laissez-faire as perceived by secondary school teachers.

For transformational leadership, the values were found to be 15.17, 15.17, 3.327, 0.13, 0.115, 1.130, -0.896, 0.23, and -3.896, respectively. For transactional leadership style, these values were 11.89, 11.89, 2.808, -0.496, 0.115, -4.313, -0.809, 0.23, and -3.517, respectively. Similarly, for laissez-faire leadership style, the values were 11.09, 11.09, 2.997, -0.355, 0.115, -3.087, -0.881, 0.23, and -3.830, respectively. According to established thresholds, data is considered normal if the z-scores for skewness and kurtosis are less than 1.96 (Field, 2009; Kim, 2013). However, for larger sample sizes, it is recommended to raise the threshold to 3.29 (Kim, 2013), as highlighted in Orcan (2018). Since the sample size is large, the standard error values

are very low, leading to relatively high z-scores (Field, 2009, as cited in Bhalla, 2019).

Although the skewness values for all three dimensions were within acceptable limits for a large sample, the kurtosis values slightly exceeded the ± 3.29 threshold, suggesting some departure from perfect normality. However, given the sufficiently large sample size ($N = 450$), these deviations were unlikely to have a significant impact on the results. Previous research indicates that parametric analyses are robust to minor violations of normality when large samples are involved; therefore, the data were considered approximately normal and appropriate for further statistical analyses (Field, 2009; Kim, 2013; Orcan, 2018).

To confirm approximate normality of the data normal probability plot (Q-Q plot) was also drawn.

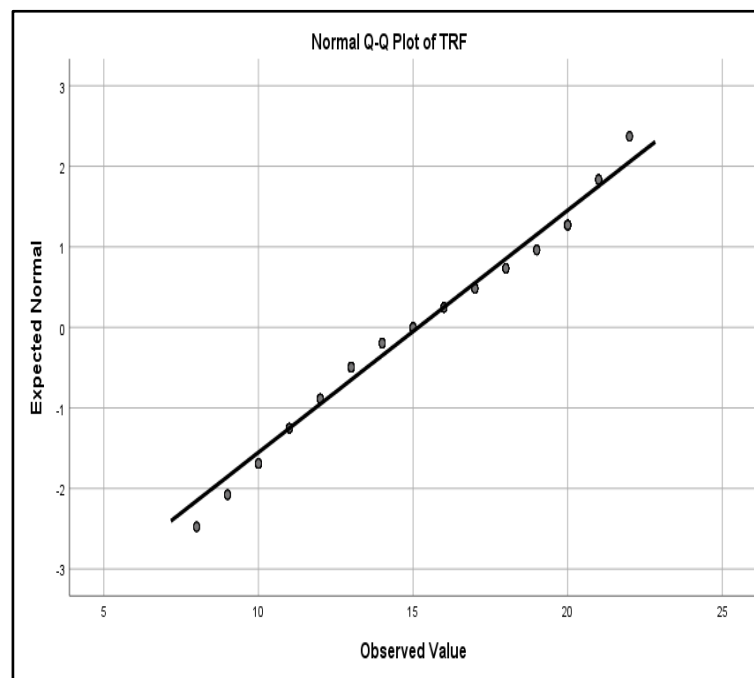


Figure 4.2.1: Normal Probability plot (Q-Q Plot) of Transformational Leadership style

The normal Q-Q Plot for transformational leadership style presented above was found to be approximately linear, indicating that the data points closely follow the expected normal distribution. This suggested that the dataset was distributed normally, confirming approximate normality.

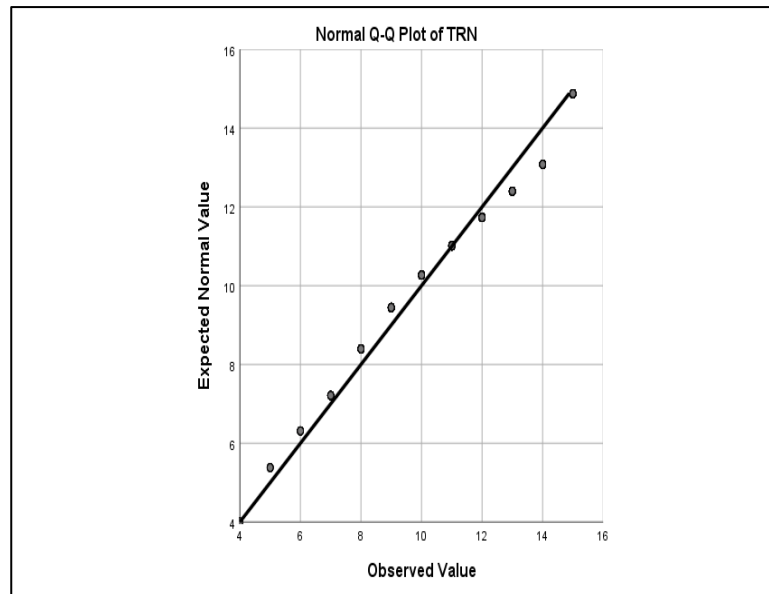


Figure 4.2.2: Normal Probability plot (Q-Q Plot) of Transactional Leadership style

The normal probability plot of transactional leadership style was found to be approximately linear. This indicated that the data was distributed normally hence confirms approximate normality.

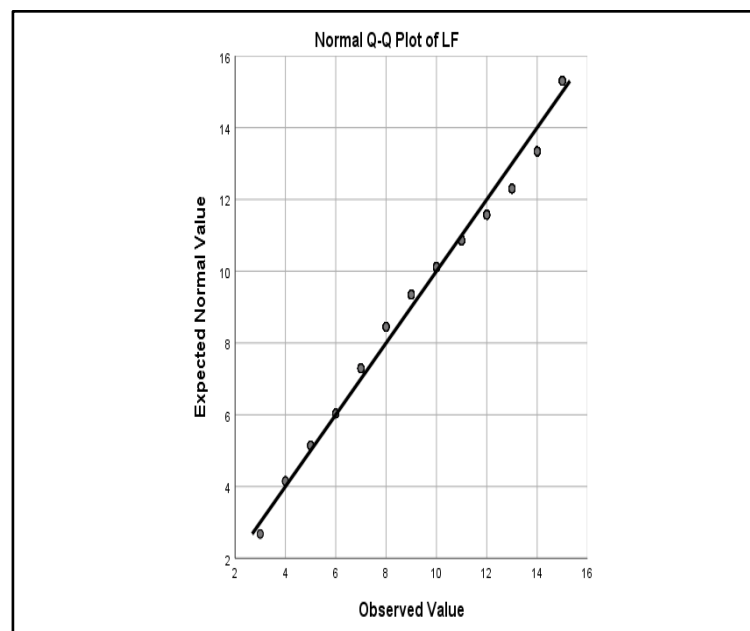


Figure 4.2.3: Normal Probability plot (Q-Q Plot) of Laissez-faire leadership style

The normal Q-Q Plot for laissez-faire leadership style was found to be approximately linear. This indicated that the data was distributed normally, hence confirming approximate normality.

4.2.2 Descriptive analysis of burnout among secondary school teachers

The collected data has been analysed to compute descriptive statistics for the variable measuring burnout through Copenhagen Burnout Inventory. The results have been presented in Table 4.2.2.

Table 4.2.2 Descriptive statistics of burnout among secondary school teachers

Dimension	N	M	MD	SD	Sk	SE (Sk)	Z (Sk)	Ku	SE (Ku)	Z (Ku)
PB	450	48.9	49	16.98	-0.10	0.115	-0.913	-0.415	0.23	-1.804
WRB	450	47.55	48	17.37	0.01	0.115	0.13	-0.529	0.23	-2.3
SB	450	47.94	48	17.22	-0.01	0.115	-0.113	-0.459	0.23	-1.996
B	450	48.13	48	16.83	-0.00	0.115	-0.026	-0.334	0.23	-1.452

Note: N = number of respondents; M = mean; MD = median; SD = standard deviation; Sk = skewness; SE(Sk) = standard error of skewness; Z(Sk) = z-value of skewness; Ku = kurtosis; SE(Ku) = standard error of kurtosis; Z(Ku) = z-value of kurtosis; PB = Personal Burnout; WRB = Work-Related Burnout; SB = Student-Related Burnout; B = Overall Burnout.

The above table 4.2.2 presents the mean, median, standard deviation, skewness, standard error of skewness, Z(Skewness), kurtosis, standard error of kurtosis, and Z(Kurtosis) for burnout and its dimensions viz., personal burnout, work-related burnout, student-related burnout among secondary school teachers.

For personal burnout, the values were found to be 48.9, 49.00, 16.988, -0.105, 0.115, -0.913, -0.415, 0.23, and -1.804, respectively. For work-related burnout, these values were 47.55, 48.00, 17.376, 0.015, 0.115, 0.13, -0.529, 0.23, and -2.3, respectively. Similarly, for student-related burnout, the values were 47.94, 48.00, 17.223, -0.013, 0.115, -0.113, -0.459, 0.23, and -1.996, respectively. For overall burnout, the values were 48.13, 48.00, 16.834, -0.003, 0.115, -0.026, -0.334, 0.23, and -1.452, respectively.

According to established thresholds, data is considered normal if the z-scores for skewness and kurtosis are less than 1.96 (Field, 2009; Kim, 2013). However, for larger sample sizes, it is recommended to raise the threshold to 3.29 (Kim, 2013), as highlighted in Orcan (2018).

To further confirm approximate normality, a normal probability plot (Q-Q plot) was also drawn.

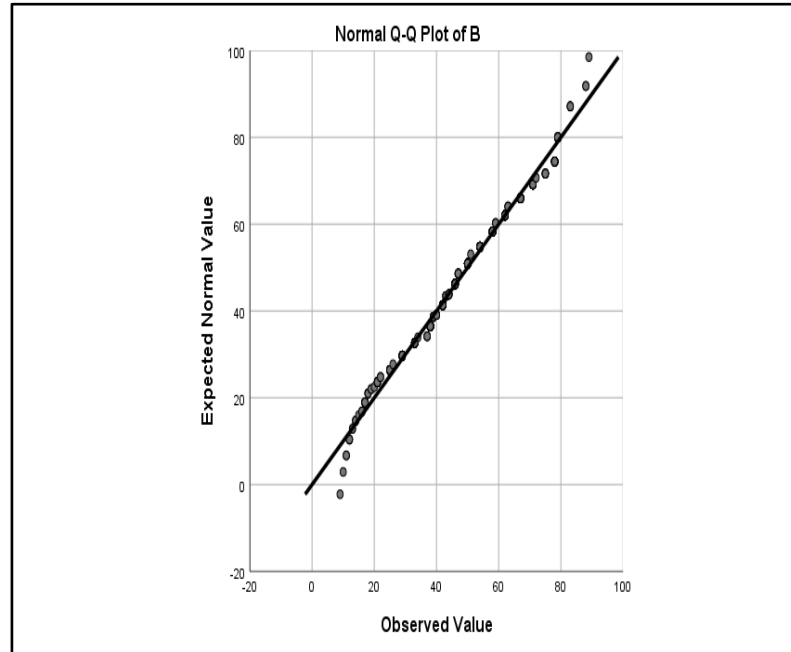


Figure 4.2.4: Normal Probability plot (Q-Q Plot) of Burnout

The normal Q-Q Plot for burnout was found to be approximately linear. This indicated that the data was distributed normally, hence confirming approximate normality.

4.2.3 Descriptive analysis of workplace bullying among secondary school teachers

The collected data has been analysed to compute descriptive statistics for the variable measuring workplace bullying through negative acts questionnaire-revised. The results have been presented in table 4.2.3.

Table 4.2.3 Descriptive statistics of workplace bullying among secondary school teachers

Workplace Bullying										
Dimension	N	M	MD	SD	Sk	SE(Sk)	Z(Sk)	Ku	SE(Ku)	Z(Ku)
PR	450	17.6	17.6	5.022	-0.021	0.115	-0.183	-0.438	0.23	-1.904
WR	450	18.74	18.74	5.815	0.971	0.115	8.443	0.471	0.23	2.048
PI	450	7.82	7.82	2.679	0.78	0.115	6.783	0.93	0.23	4.043
WB	450	44.15	44.15	13.025	0.465	0.115	4.043	-0.243	0.23	-1.057

Note: N = number of respondents; M = mean; MD = median; SD = standard deviation; Sk = skewness; SE(Sk) = standard error of skewness; Z(Sk) = z-value of skewness; Ku = kurtosis; SE(Ku) = standard error of kurtosis; Z(Ku) = z-value of kurtosis; PR = Person-Related Bullying; WR = Work-Related Bullying; PI = Physically Intimidating Bullying; WB = Overall Workplace Bullying.

The above Table 4.2.3 presents the mean, median, standard deviation, skewness, standard error of skewness, Z(Skewness), kurtosis, standard error of kurtosis, and Z(Kurtosis) for workplace bullying and its dimensions namely person-related bullying, work-related bullying, and physically intimidating bullying.

For person-related bullying, the values were found to be 17.6, 17.6, 5.022, -0.021, 0.115, -0.183, -0.438, 0.23, and -1.904, respectively. For work-related bullying, these values were 18.74, 18.74, 5.815, 0.971, 0.115, 8.443, 0.471, 0.23, and 2.048, respectively. Similarly, for physically intimidating bullying, the values were 7.82, 7.82, 2.679, 0.78, 0.115, 6.783, 0.93, 0.23, and 4.043, respectively. For workplace bullying, the values were 44.15, 44.15, 13.025, 0.465, 0.115, 4.043, -0.243, 0.23, and -1.057, respectively.

According to established thresholds, data are considered normal if z-scores for skewness and kurtosis are less than 1.96 (Field, 2009; Kim, 2013). For larger sample sizes, however, it is recommended to raise the threshold to 3.29 (Kim, 2013), as highlighted in Orcan (2018). The analysis showed that the work-related and physically intimidating bullying dimensions recorded skewness and/or kurtosis values slightly exceeding the ± 3.29 threshold, indicating moderate deviations from a normal distribution. The overall workplace bullying score also exhibited a mild positive skew, suggesting slight asymmetry in the data. However, considering the large sample size ($N = 450$), these deviations were not expected to substantially influence the accuracy or reliability of the results. Previous research has shown that parametric tests remain robust to minor violations of normality in large samples; therefore, the data were considered approximately normal and suitable for further parametric analyses (Field, 2009; Kim, 2013; Orcan, 2018).

To confirm approximate normality of the data normal probability plot (Q-Q plot) was also drawn.

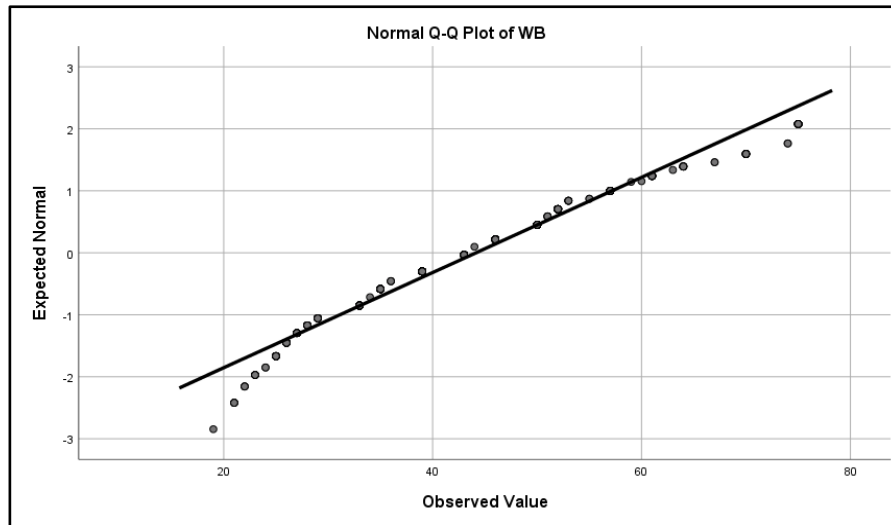


Figure 4.2.5: Normal probability plot (Q-Q Plot) of workplace bullying among secondary school teachers

The Q-Q plot for workplace bullying shows that the data points closely align with the diagonal line, hence confirming approximate normality.

4.2.4 Descriptive analysis of psychological empowerment among secondary school teachers

The collected data has been analysed to compute descriptive statistics for the variable measuring psychological empowerment through psychological empowerment scale. The results have been presented in table 4.2.4.

Table 4.2.4 Descriptive statistics of psychological empowerment among secondary school teachers

Dimension	N	M	MD	SD	Sk	SE (Sk)	Z (Sk)	Ku	SE (Ku)	Z (Ku)
M	450	14.02	14.02	3.227	-0.348	0.115	-3.026	-0.457	0.23	-1.987
C	450	15	15	3.206	-0.351	0.115	-3.052	-0.433	0.23	-1.883
SD	450	13.01	13.01	3.225	-0.336	0.115	-2.922	-0.459	0.23	-1.996
I	450	12	12	3.21	-0.354	0.115	-3.078	-0.433	0.23	-1.883
PE	450	54.03	54.03	12.852	-0.354	0.115	-3.078	-0.443	0.23	-1.926

Note: N = number of respondents; M = mean; MD = median; SD = standard deviation; Sk = skewness; SE(Sk) = standard error of skewness; Z(Sk) = z-value of skewness; Ku = kurtosis; SE(Ku) = standard error of kurtosis; Z(Ku) = z-value of kurtosis; M = Meaning; C = Competence; SD = Self-Determination; I = Impact; PE = Overall Psychological Empowerment.

The above Table 4.2.4 presents the mean, median, standard deviation, skewness, standard error of skewness, Z (Skewness), kurtosis, standard error of kurtosis, and

Z(Kurtosis) for psychological empowerment and its dimensions namely meaning, competence, self-determination, and impact.

For the meaning dimension, the values were 14.02, 14.02, 3.227, -0.348, 0.115, -3.026, -0.457, 0.23, and -1.987, respectively. For competence, these values were 15, 15, 3.206, -0.351, 0.115, -3.052, -0.433, 0.23, and -1.883, respectively. Similarly, for self-determination, the values were 13.01, 13.01, 3.225, -0.336, 0.115, -2.922, -0.459, 0.23, and -1.996, respectively. For impact, the values were 12, 12, 3.21, -0.354, 0.115, -3.078, -0.433, 0.23, and -1.883, respectively. Finally, for psychological empowerment (overall), the values were 54.03, 54.03, 12.852, -0.354, 0.115, -3.078, -0.443, 0.23, and -1.926, respectively.

According to established thresholds, the data is considered normal if the z-scores for skewness and kurtosis are less than 1.96 (Field, 2009; Kim, 2013). However, for larger sample sizes, it is recommended to raise the threshold to 3.29 (Kim, 2013), as highlighted in Orcan (2018).

To confirm the approximate normality of the data, a normal probability plot (Q-Q plot) was also drawn.

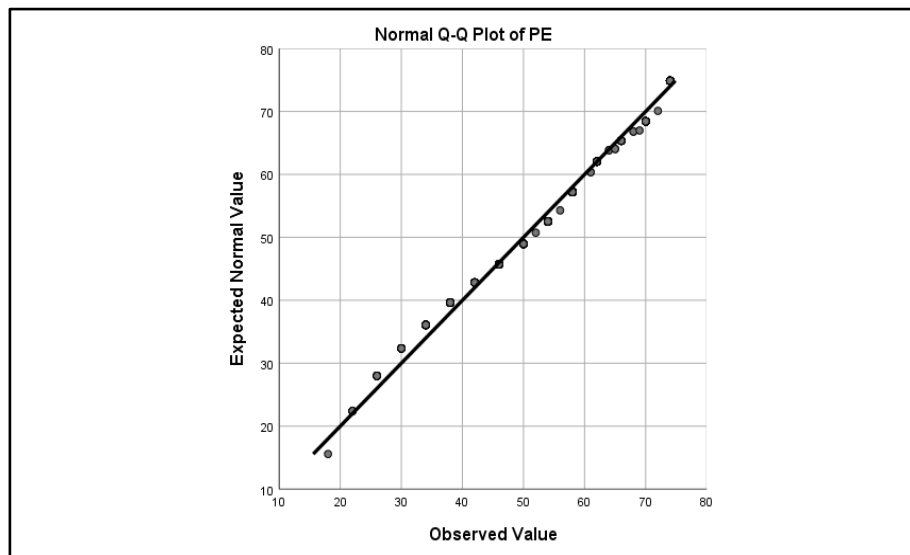


Figure 4.2.6: Normal Probability plot (Q-Q Plot) of Psychological Empowerment

The normal probability plot was found to be approximately linear. This indicated that the data was distributed normally, hence confirms approximate normality.

4.3 PERCENTAGE ANALYSIS

4.3.1 Percentage-wise analysis of the leadership styles of principals as perceived by secondary school teachers

The first objective was, “To explore the leadership styles of principals as perceived by secondary school teachers.” The present section deals with the analysis related to perception of teachers towards leadership styles of principals. The analysis comprises of perception of overall number and overall percentage of secondary school teachers towards leadership styles along with the graphical representation of the same. Table 4.3.1 presents the percentage-wise analysis of perception of teachers towards leadership styles of principals.

Table 4.3.1 Percentage-wise analysis of leadership styles of principals as perceived by teachers

Leadership Styles	Overall	
	N	%
Transformational	344	76.44
Transactional	82	18.22
Laissez-faire	24	5.33

Table 4.3.1 shows the percentage-wise perception of teachers towards perceived leadership styles of principals viz., transformational, transactional, and laissez-faire. It is evident from the table that 76.44% (n=344) of teachers perceived their principals as exhibiting transformational leadership style. On the other hand, about 18.22% (n=82) and 5.33% (n=24) of teachers perceived their principals as exhibiting transactional leadership style and laissez-faire leadership style respectively. The figure 4.3.1 illustrates the distribution of perception of teachers towards leadership styles of principals.

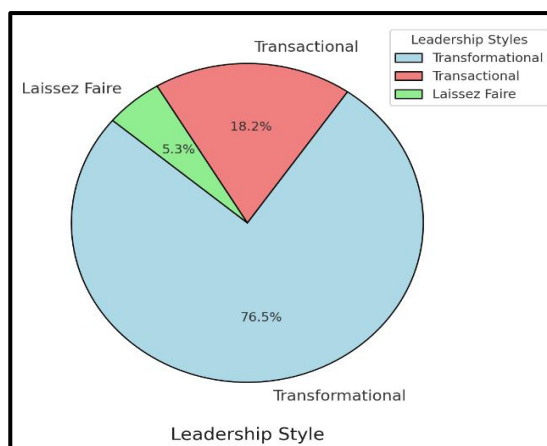


Figure 4.3.1 Distribution of perception of teachers towards leadership styles of principals

Discussion of Results

The percentage analysis revealed that majority of teachers i.e., 76.44% perceived their principals to exhibit transformational leadership style, followed by 18.22% who perceived them to exhibit transactional leadership style, and only 5.33% of teachers reported their principals as exhibiting laissez-faire leadership style.

Similar findings regarding the prevalence of transformational leadership in educational settings were observed in the study by Hauserman et al. (2013) who found that teachers strongly preferred aspects of transformational leadership in principals than transactional or laissez-faire behaviours.

4.4 Percentage-wise analysis of levels of burnout and psychological empowerment

The second objective of the study was, “To explore the levels of burnout and psychological empowerment among secondary school teachers.”

4.4.1 Percentage-wise analysis of levels of burnout of secondary school teachers

The present section deals with the analysis related to burnout of teachers. The analysis includes the overall number and percentage of secondary school teachers experiencing burnout along with the graphical representation of the same. Table 4.4.1 presents the percentage-wise analysis of burnout of teachers.

Table 4.4.1 Percentage-wise analysis of burnout of teachers

Levels of burnout	Dimensions of burnout							
	PB		WRB		SB		B	
	N	%	N	%	N	%	N	%
Low	215	47.78	143	31.77	345	76.67	277	61.55
Moderate	176	39.11	134	29.77	102	22.66	97	21.56
High	59	13.11	173	38.44	03	0.67	76	16.89

Note: PB=Personal Burnout, WRB=Work-related Burnout, SB=Student-related burnout, B= Burnout

Table 4.4.1 shows the percentage-wise distribution of levels of burnout and its dimensions, namely personal burnout, work-related burnout, and student-related burnout.

It is evident from the table that 47.78% (n=215) of respondents reported low personal burnout, 39.11% (n=176) reported moderate burnout and 13.11% (n=59) high burnout levels. 31.77% (n=143) of respondents reported low work-related burnout while 29.77% (n=134) reported moderate burnout, and 38.44% (n=173) reported high burnout. For student-related burnout, most of the teachers, 76.67% (n=345), reported low burnout, 22.66% (n=102) moderate burnout, and 0.67% (n=3) high burnout. When considering burnout, 61.55% of teachers exhibited low levels, 21.56% fell into the moderate category, and 16.89% experienced high levels of burnout. Figures 4.4.1 to 4.4.4 show the distribution of the levels of personal burnout, work-related burnout, student-related burnout, and overall burnout among teachers.

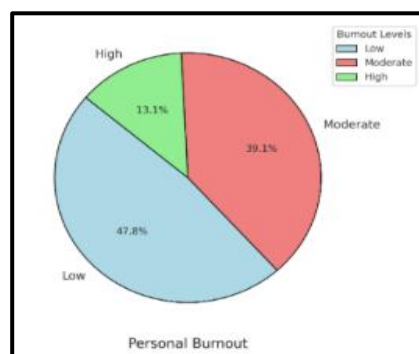


Fig. 4.4.1 Levels of personal burnout of teachers

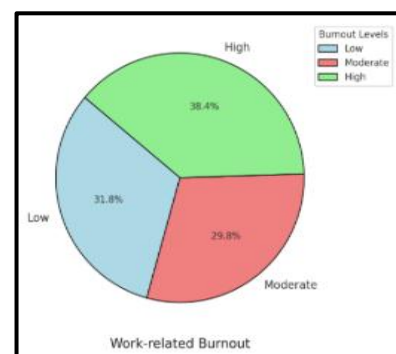


Fig. 4.4.2 Levels of work related burnout of teachers

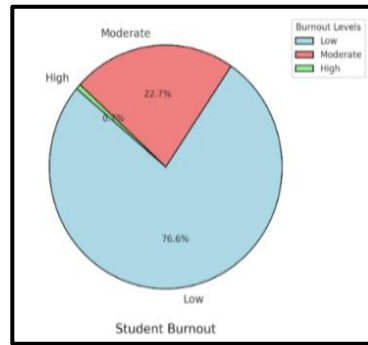


Fig. 4.4.3 Levels of student-related burnout of teachers

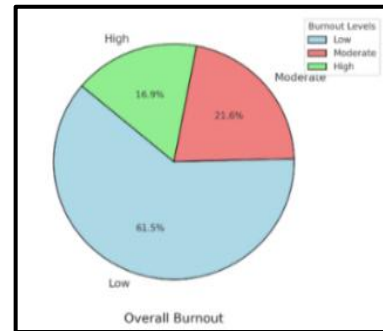


Fig. 4.4.4 Levels of burnout of teachers (overall)

Discussion of results

The percentage-wise analysis revealed that majority of teachers (47.78%) experienced low levels of personal burnout, followed by 39.11% who reported moderate levels, and 13.11% who experienced high levels of personal burnout. In terms of work-related burnout, the highest proportion of teachers (38.44%) reported high levels, while 31.77% experienced low levels and 29.77% reported moderate levels, making it the dimension with the highest proportion of respondents experiencing high burnout. Regarding student-related burnout, a significant majority (76.67%) reported low levels, 22.66% experienced moderate levels, and only 0.67% reported high levels, indicating that this dimension had the least reported high burnout cases. Overall, 61.55% of teachers reported low level of burnout, followed by 21.56% with moderate and 16.89% with high level of burnout.

The current research findings were in line with the prevalence of burnout among teachers across various contexts. For instance, studies by Agyapong et al. (2022) and Piperac et al. (2021) reported burnout rates ranging from 27.1% to 41.3% and 25.12% to 74%, respectively, in Canada and Serbia, with dimensions such as personal and work-related burnout showing varying intensities. Similarly, Gupta and Jain (2020) and Sharma et al. (2019) highlighted high burnout rates among urban and rural teachers in India (as cited in Pandey & Sayed, 2024). Additionally, the 2024 Gallup poll found that 44% of K–12 teachers in U.S. often felt burnt out (Alberts, 2024), while a 2024 RAND Corporation report revealed that teachers experienced nearly double the job-related stress compared to other professions.

4.4.2 Percentage-wise analysis of levels of psychological empowerment of secondary school teachers

This section relates to percentage-wise analysis of levels of psychological empowerment of secondary school teachers and its dimensions: meaning, competence, self-determination, and impact. The analysis includes the overall number and percentage of teachers' psychological empowerment, accompanied by a graphical representation. Table 4.4.2 provides a detailed percentage-wise breakdown of psychological empowerment among teachers.

Table 4.4.2 Percentage-wise levels of psychological empowerment of teachers

Levels of PE	Dimensions of psychological empowerment									
	M		I		C		SD		PE	
	N	%	N	%	N	%	N	%	N	%
Low	349	77.5	228	50.67	133	29.56	230	51.1	229	50.9
Moderate	52	11.56	125	27.78	178	39.56	146	32.44	120	26.67
High	49	10.89	97	21.56	139	30.89	74	16.44	101	22.44

Note: M = Meaning; I = Impact; C = Competence; SD = Self-Determination; PE = Overall Psychological Empowerment

Table 4.4.2 shows the percentage-wise levels of psychological empowerment and its various dimensions, viz., meaning, impact, competence, and self-determination. It is evident from the table that 77.5% (n=349) of respondents reported low psychological empowerment in the meaning dimension, while 11.56% (n=52) and 10.89% (n=49) were at moderate and high levels of meaning respectively. For impact, a majority, 50.7% (n=228), reported low levels of impact in their work, while 27.8%(n=125), indicated moderate levels, and 21.6% (n=97), experienced high levels. Further, a substantial proportion, 39.6%(n=178), reported moderate levels of competence, 30.9%(n=139), high level and 29.6%(n=133), low level. Similarly, a majority, 51.1% (n=230), reported low levels of self-determination, while 32.4%(n=146), indicated moderate levels, and 16.4%(n=74), reported high level. Finally, the psychological empowerment levels were found to be low for 50.9%(n=229), of teachers, moderate for 26.67%(n=120) and 22.44%(n=101) for high category. Figures 4.4.5 to 4.4.9 show the distribution of the levels of meaning, impact,

competence and self-determination and overall psychological empowerment among teachers.

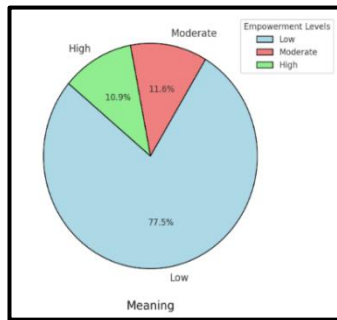


Fig. 4.4.5 Levels of meaning among teachers

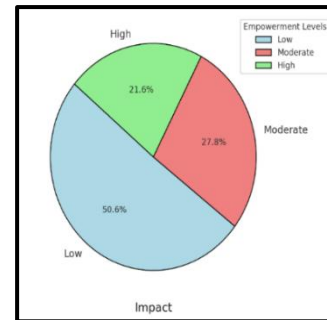


Fig. 4.4.6 Levels of impact among teachers

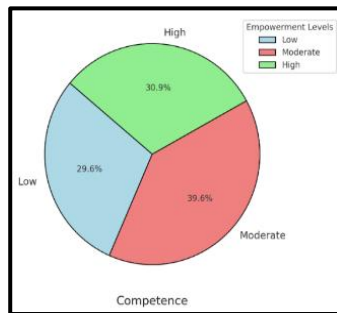


Fig. 4.4.7 Levels of competence among teachers

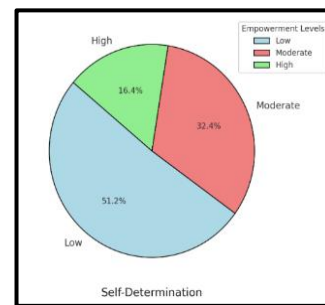


Fig. 4.4.8 Levels of self-determination among teachers

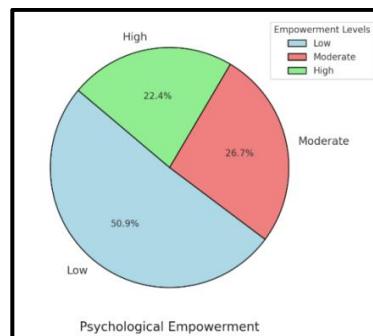


Fig. 4.4.9 Levels of psychological empowerment among teachers

Discussion of results

The percentage-wise analysis of psychological empowerment dimensions revealed that majority of teachers (77.5%) experienced low level of meaning, followed by 11.56% with moderate level and 10.89% with high level. Similarly, 50.67% of teachers reported low level of impact, 27.78% experienced moderate level, and 21.56% reported high level of impact. In terms of competence, most teachers (39.56%)

experienced moderate level, followed by 30.89% with high level and 29.56% with low level. Regarding self-determination, a majority (51.1%) reported low levels, while 32.44% experienced moderate and only 16.44% reported high levels. Overall, 50.9% of teachers experienced low levels of psychological empowerment, 26.67% reported moderate levels, and 22.44% experienced high level.

The observed levels of psychological empowerment in this study differed somewhat from earlier findings. Erturk (2022) in Turkey and Singh and Kaur (2019) in India reported that teachers generally exhibited moderate to high levels of psychological empowerment across dimensions such as meaning, competence, self-determination, and impact. In contrast, the present study found that a majority of teachers reported low levels of empowerment in meaning, impact, and self-determination, with competence showing relatively higher scores at the moderate level.

4.5 Percentage-wise analysis of frequency and forms of workplace bullying among secondary school teachers

The third objective of the study was, “To find out the frequency and forms of workplace bullying among secondary school teachers”

This section relates to the frequency of workplace bullying and percentage-wise analysis of workplace bullying and its forms: person-related bullying, work-related bullying, and physically intimidating bullying among secondary school teachers. Table 4.5.1 provides frequency of workplace bullying among teachers.

4.5.1 Frequency of workplace bullying

The 23rd item of the Negative Acts Questionnaire-Revised (NAQ-R) employs a self-labelling approach to assess the frequency of workplace bullying. This item provides respondents with a formal definition of bullying and asks them to indicate how often they have experienced such behaviour over a specified period, typically the last six months. This method captures individuals' subjective perceptions of being bullied, complementing the behavioural frequency data obtained from the other 22 items in the Negative Acts Questionnaire-Revised. In this study, teachers were asked to report their experiences of workplace bullying over the past six months using the self-labelling item.

Table 4.5.1 Frequency of workplace bullying among teachers

Frequency	Number of Teachers	%
No	264	58.7
Yes, but only rarely	152	33.8
Yes, now and then	34	7.6
Yes, several times per week	0	0
Yes, almost daily	0	0

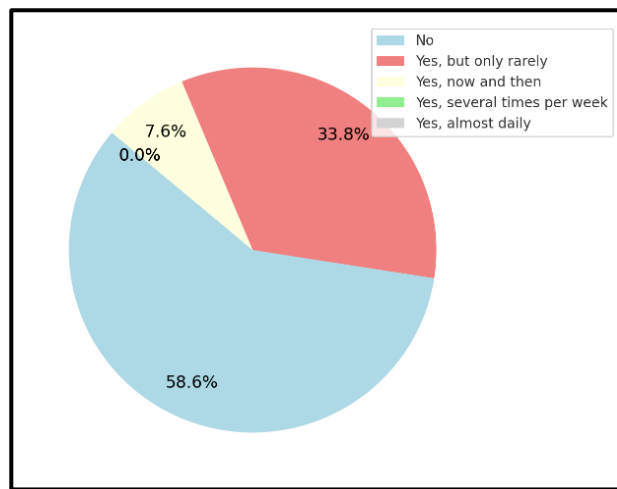


Fig. 4.5.1 Frequency of workplace bullying

The table 4.5.1 indicated that majority of teachers (58.7%) reported not experiencing bullying at work in the last six months. However, a significant proportion (33.8%) indicated experiencing bullying but only rarely, while 7.6% reported facing it now and then while none of the respondents reported being bullied several times per week or almost daily.

Discussion of results

With respect to experiences over the past six months, 58.7% of teachers indicated no experience of workplace bullying, while 33.8% reported rare instances and 7.6% experienced occasional bullying. Notably, no teacher reported experiencing bullying several times per week or on an almost daily basis. These results suggested that while severe and frequent bullying incidents were not prevalent, a substantial number of teachers still encountered workplace bullying rarely and now and then, which may have implications for the well-being and job satisfaction of teachers.

The findings of this study align with previous research on workplace bullying among teachers. De Wet and Jacobs (2013) reported that 90.8% of teachers in South

Africa experienced workplace bullying in the previous 12 months, with 89.1% subjected to multiple categories of bullying behaviours.

The findings suggested that while the prevalence of frequent and severe bullying may vary across studies and regions, the occurrence of sometimes or only rarely bullying remains a significant concern in the teaching profession. The absence of reports of severe bullying in this study could indicate underreporting or differing perceptions of what constitutes severe bullying among respondents. Nevertheless, the substantial proportion of teachers experiencing sometimes or only rarely bullying underscores the need for interventions aimed at promoting a positive and supportive work environment in educational settings.

4.5.2 Percentage-wise analysis of forms of workplace bullying among teachers

The percentage-wise analysis includes the overall number and percentage of workplace bullying in teachers, accompanied by graphical representation. Table 4.5.2 provides a detailed percentage-wise breakdown of workplace bullying among teachers.

Table 4.5.2 Percentage-wise analysis of forms of workplace bullying among teachers.

Workplace Bullying	Forms of workplace bullying							
	PR		WR		PI		WB	
	N	%	N	%	N	%	N	%
Not bullied	351	78	149	33.11	153	34	242	53.77
Sometimes bullied	99	22	249	55.33	242	53.78	190	42.22
Severely bullied	0	0	52	11.55	53	11.78	18	4

Note: PR=Person-Related Bullying, WR=Work-related bullying, PI=Physically Intimidating Bullying, WB= Workplace Bullying (Overall)

The above Table 4.5.2 revealed the levels of workplace bullying across the dimensions of person-related, work-related, physically intimidating bullying. Most teachers, 78% (n=351), reported not experiencing person-related bullying. On the other hand, 22% (n=99) indicated being occasionally bullied, while none reported severe bullying. 33.11% (n=149) of teachers reported no work-related bullying, while 55.33% (n=249) experienced being bullied occasionally, and 11.55% (n=52) were severely bullied in the workplace. For physically intimidating bullying, 34% (n=153) of teachers

did not experience bullying, whereas 53.78% (n=242) occasionally faced bullying, and 11.78% (n=53) reported severe bullying. In terms of overall workplace bullying, 53.77% (n=242) of teachers indicated no bullying, while 42.22% (n=190) reported being occasionally bullied, and 4% (n=18) experienced severe bullying. The below figures 4.5.1 to 4.5.4 show the levels of personal, work-related, physically intimidating, and overall workplace bullying among teachers.

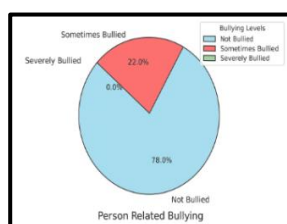


Fig. 4.5.2 Levels of Person-Related Bullying of teachers

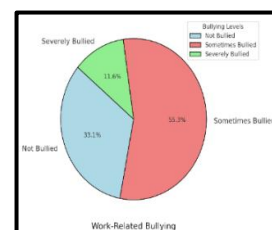


Fig. 4.5.3 Levels of Work-Related Bullying of teachers

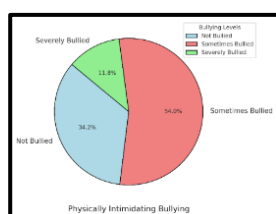


Fig. 4.5.4 Levels of Physically Intimidating Bullying of teachers

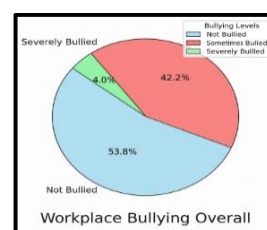


Fig. 4.5.5 Levels of Workplace Bullying of teachers (overall)

Discussion of results

The percentage-wise analysis of workplace bullying revealed that majority of teachers (78%) reported no experience of person-related bullying, followed by 22% who reported occasional experiences, while no instances of severe person-related bullying was reported. In the case of work-related bullying, 55.33% of teachers reported occasional exposure, followed by 33.11% who reported no bullying, and 11.55% who experienced it severely. Similarly, 53.78% of teachers reported occasional physically intimidating bullying, 34% reported no such experience, and 11.78% faced it severely. Regarding overall workplace bullying, 53.77% of teachers reported no exposure, followed by 42.22% who experienced occasional bullying, and 4% who faced severe bullying.

These findings align with previous studies. For instance, Ariza-Monte (2016) reported that 48.7% of teachers worldwide acknowledged experiencing workplace bullying, while 51.3% did not. Cemaloglu (2007) found that 50% of school teachers in Turkey had experienced bullying. The 6th European Working Conditions Survey (2016) recorded a bullying prevalence rate of 4.4% among education employees, highlighting its persistence in the sector. In South Africa, De Wet and Jacobs (2013) revealed that 90.8% of teachers had experienced workplace bullying in the previous 12 months, with 89.1% subjected to multiple categories of bullying behaviours. Taken together, these studies demonstrate that workplace bullying among teachers varies considerably across regions but remains a widespread and persistent concern globally.

4.6 COMPARATIVE ANALYSIS

The fourth objective was “to compare the perceived leadership styles of principals, levels of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment among teachers with respect to gender, locality, experience, and type of school.

To examine the differences in mean scores of perceived leadership styles of principals, levels of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment the variables were analysed and the results have been shown on basis of the gender, locality, teaching experience and type of school.

4.6.1 Comparison of perceived leadership styles of principals with respect to gender, locality, teaching experience and type of school

Hypothesis 1(a): “There exists no significant difference in perceived leadership styles of principals with respect to gender”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.6.1), on the basis of gender.

4.6.1 Results relating to differences in perceived leadership styles of principals with respect to gender

Table 4.6.1 Mean scores of perceived leadership styles of principals with respect to gender

Leadership Styles	Gender	N	M	SD	t-value
TRF	Male	183	14.58	3.14	3.131**
	Female	267	15.57	3.39	
TRN	Male	183	12.31	2.80	2.64*
	Female	267	11.6	2.78	
LF	Male	183	11.47	2.97	2.216*
	Female	267	10.84	2.98	

Note: "N=number of respondents, M=mean, SD= standard deviation, TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership." ** sign. at 0.01, *sign. at 0.05.

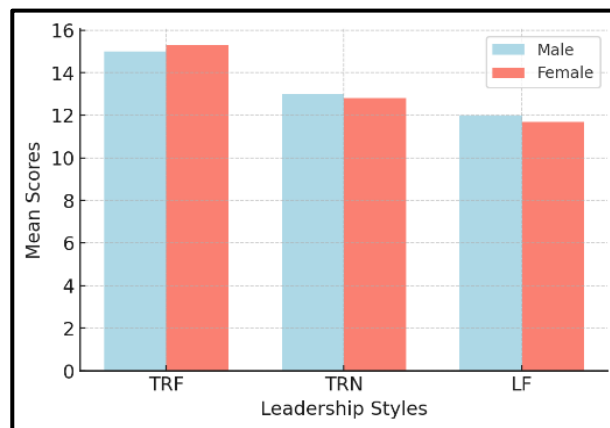


Figure 4.6.1 Mean scores of perceived leadership styles of principals with respect to gender

Table 4.6.1 displays the mean scores and SD of different leadership styles, namely transformational, transactional, and laissez-faire, as perceived by male and female teachers. The mean scores of transformational, transactional, and laissez-faire leadership styles were found to be 14.58, 12.31, and 11.47 for male teachers, and 15.57, 11.60, and 10.84 for female teachers, respectively.

The SD of transformational, transactional, and laissez-faire leadership styles was found to be 3.14, 2.80, and 2.97 for male teachers; and 3.39, 2.78, and 2.98 for female teachers respectively.

Further, the t-values calculated of transformational, transactional, and laissez-faire leadership styles were found to be 3.131, 2.640, and 2.216 respectively. The t-values found were statistically significant at 0.01 level for transformational and transactional leadership, and significant at 0.05 level for laissez-faire leadership style.

Discussion of results

The significant t-values showed that there exist significant differences in the perceived leadership styles viz., transformational, transactional, and laissez-faire between male and female teachers. The observation of mean scores of transformational leadership style showed that mean scores of female teachers was more than that of the male teachers. While for transactional and laissez-faire leadership styles male teachers scored more than their female counterparts.

As a result, it can be inferred that female teachers perceived their principals as exhibiting greater transformational leadership style, characterised by inspiring and motivating employees, fostering innovation, and encouraging personal and professional growth. In contrast, male teachers who perceived their principals as demonstrating greater transactional leadership style, which emphasises structured tasks, rewards, and penalties to maintain performance expectations, and laissez-faire leadership styles characterised by a hands-off approach, minimal supervision, and limited direct involvement in decision-making.

Thus, based on the results, it can be deduced that hypothesis 1(a) which states that “there exists no significant difference in perceived leadership styles of principals with respect to gender” is not accepted.

The present findings aligned with research on gender differences in perceptions of leadership styles. Verma (2017) reported that teachers’ views of their principals’ leadership effectiveness varied depending on both the gender of the principal as well as the teacher, while an NCERT study (Verma, OSRE Abstract-2016) highlighted significant gender differences in how transformational leadership was perceived among higher secondary school teachers. These results suggested that gender influences not only leadership behaviours but also how they are perceived by others. Consistent with

these insights, Alharthi (2024) found that female faculty members exhibited a stronger preference for transformational leadership, whereas male faculty members leaned toward transactional leadership. Similarly, Eagly et al. (2003) demonstrated that female leaders were more likely to adopt ‘transformational leadership’ behaviours, and Silva and Mendis (2017) reported that female leaders scored higher on transformational leadership, while male leaders scored higher on transactional and laissez-faire leadership styles. In the present context, teachers’ perceptions of leadership appear to be shaped by gender-influenced orientations and professional experiences. Female teachers generally prefer relationship-focused, collaborative, and supportive practices, which resonate with transformational leadership. In contrast, male teachers tend to prioritise structure, authority, and task efficiency, reflecting a closer alignment with transactional and laissez-faire leadership.

Hypothesis1 (b): “There exists no significant difference in perceived leadership styles of principals with respect to locality”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.6.2), on the basis of locality.

4.6.2 Results relating to differences in perceived leadership styles of principals with respect to locality

Table 4.6.2 Mean scores of perceived leadership styles with respect to locality

Leadership Styles	Locality	N	M	SD	t-value
TRF	Rural	332	15.44	3.34	2.912**
	Urban	118	14.41	3.17	
TRN	Rural	332	11.65	2.74	3.018**
	Urban	118	12.55	2.90	
LF	Rural	332	10.86	2.92	2.846**
	Urban	118	11.76	3.10	

*Note: “N=number of respondents, M=mean, SD=standard deviation, TRF=Transformational Leadership, TRN=Transactional Leadership, LF =Laissez-faire leadership.” ** sign. at 0.01, *sign. at 0.05.*

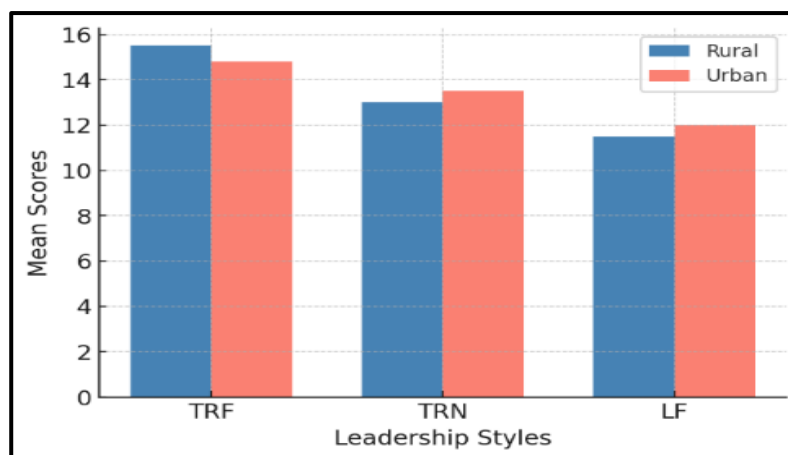


Figure 4.6.2 Mean scores of perceived leadership styles of principals with respect to locality

Table 4.6.2 shows the mean scores and SD of dimensions of leadership styles, i.e., “transformational, transactional, and laissez-faire leadership style” as perceived by teachers teaching in rural and urban secondary schools. The mean scores of ‘transformational’, ‘transactional’, and ‘laissez-faire’ leadership styles for teachers teaching in rural schools were found to be 15.44, 11.65, and 10.86 respectively; and for teachers teaching in urban schools were found to be 14.41, 12.55, and 11.76 respectively.

The SD of ‘transformational’, ‘transactional’, and ‘laissez-faire’ leadership style as perceived by teachers teaching in rural schools was found to be 3.34, 2.74, and 2.92 respectively; and for teachers teaching in urban schools was found to be 3.17, 2.90, and 3.10 respectively.

Further, the t-values calculated for ‘transformational’, ‘transactional’, and ‘laissez-faire’ leadership style as perceived by teachers teaching in urban and rural secondary schools were found to be 2.91, 3.01, and 2.84 respectively. All the t-values were found to be statistically significant at 0.01 level.

Discussion of results

The significant t-values showed that there were significant differences in the perceived leadership styles of principals for teachers teaching in urban and rural secondary schools. The observation of mean scores for transformational leadership style indicated that teachers teaching in rural schools reported higher mean scores compared to teachers teaching in urban schools. While for transactional, and laissez-

laissez-faire leadership styles teachers teaching in urban schools scored more than their rural counterparts.

As a result, it can be inferred that teachers teaching in rural schools perceived their principals as exhibiting greater transformational leadership style, characterised by inspiring and motivating employees, fostering innovation, and encouraging personal and professional growth. While, teachers teaching in urban schools perceived their principals as demonstrating greater transactional leadership style, that is, emphasised structured tasks, rewards, and penalties to maintain performance expectations, and greater laissez-faire leadership styles characterised by a hands-off approach, minimal supervision, and limited direct involvement in decision-making.

Thus, the hypothesis 1(b) which states that “there exists no significant difference in perceived leadership styles of principals with respect to locality” is not accepted.

The findings align with previous research indicating significant locality-based differences in the leadership perceptions among teachers. Alharthi (2024) found that teachers in rural settings perceived principals as more transformational, whereas urban teachers placed greater emphasis on transactional leadership. Barbosa and Coneway (2023) observed that rural principals often adopted a blend of transformational and transactional approaches to build supportive environments, leading rural teachers to view transformational leadership more positively. Conversely, urban teachers encountered more structured and performance-driven approaches, contributing to stronger perceptions of transactional and laissez-faire leadership. Patterson (2024) further highlighted that rural teachers reported higher levels of commitment when principals exhibited transformational behaviours, underscoring the value of such leadership in rural educational contexts. In the context of Assam, urban school teachers tend to perceive leadership as more transactional and laissez-faire, possibly due to higher administrative demands and performance pressures, whereas rural teachers perceive it as more transformational, likely owing to closer interpersonal engagement and participative school environments.

Hypothesis1(c): “There exists no significant difference in perceived leadership styles of principals with respect to teaching experience”.

The hypothesis was examined by using one-way ANOVA and the results have been shown in Table (4.6.3), on the basis of teaching experience.

4.6.3 Results relating to differences in perceived leadership styles of principals with respect to teaching experience

In order to test this hypothesis, and to find out if the perceived leadership styles of principals differ with respect to teaching experience, the respondents were divided into three groups/categories, namely, ‘less than 5 years,’ ‘5-10 years,’ and ‘10 years and above’ and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene’s test.

Table 4.6.3.1 Test of homogeneity of variances for perceived leadership styles of principals

Perceived Leadership Styles	Levene Statistic	df1	df2	Sig.
TRF	6.307	2	447	0.002*
TRN	0.486	2	447	0.615
LF	0.281	2	447	0.755

*Note: “TRF=Transformational Leadership, TRN=Transactional Leadership, LF =Laissez-faire leadership. *Sign. at 0.05”*

The above Table 4.6.3.1 depicts the results of Levene’s test for ‘leadership styles,’ namely, ‘transformational’, ‘transactional’, and ‘laissez-faire’ as perceived by secondary school teachers. Since the p-value for transformational leadership style was found to be 0.002, that is, less than 0.05, this indicated that there was no homogeneity of variances, that is, unequal variances assumed; hence Welch test should be applied for transformational leadership style. Further, for ‘transactional leadership’ and ‘laissez-faire leadership’ styles, the p-values were found to be 0.615 and 0.755 respectively, that is, greater than 0.05, which showed that homogeneity of variances, that is, equal variances assumed, hence one-way ANOVA can be applied for the concerned leadership styles.

Table 4.6.3.2 Robust Tests of equality of means for Transformational Leadership Style

		L. Statistic	df1	df2	Sig.
TRF	Welch	9.555	2	264.235	.000*

Note: TRF=Transformational Leadership, *sign. at 0.05

The above Table 4.6.3.2 shows the differences for transformational leadership style of teachers with respect to teaching experience, namely, less than 5 years, 5–10 years, and 10 years and above. The value of Welch Statistic for transformational leadership style was found to be 9.555. The p-value for transformational leadership style was found to be less than 0.05 ($p = 0.000$), hence it can be inferred that at least one category of independent variable differs significantly from other categories. This suggested that perceived transformational leadership style of teachers differed with respect to teaching experience. Thus, for paired comparisons, in post hoc analysis, the Games-Howell method was applied (because in Welch test p-value was less than 0.05). The following Table 4.6.3.3 shows the multiple comparisons using the Games-Howell method for transformational leadership style.

Table 4.6.3.3 Multiple comparisons for dimension of Transformational Leadership style

DV	Tch Exp	Tch Exp	Mean Difference	Std. Error	Sig.
TRF	1	2	1.34**	0.40	0.003**
		3	-0.01	0.41	1.000
	2	1	-1.34**	0.40	0.003**
		3	-1.35***	0.34	0.000***
	3	1	0.01	0.41	1.000
		2	1.35***	0.34	0.000***

Note: 1=less than 5 years, 2=5-10 years, and 3=10 years & above, TRF=Transformational Leadership ***highly significant ($p < 0.001$), ** sign. at 0.01, *sign. at 0.05.

Table 4.6.3.4 Descriptive statistics for transformational leadership with respect to teaching experience

Perceived Leadership Style	Exp	N	M	SD	SE
TRF	1	112	15.58	3.50	0.33
	2	140	14.24	2.81	0.23
	3	198	15.59	3.43	0.24

Note: "Exp=Experience, N=number of respondents, M=mean, SD=Standard deviation, SE=Standard Error, TRF=Transformational Leadership, 1=less than 5 years, 2=5-10 years, 3=10 years & above"

To explore the statistical significance of this difference among multiple pairs of sample groups, the Games-Howell post hoc test was applied. While the p-values for teaching experience of ‘less than 5 years and 5–10 years’, ‘less than 5 years and 10 years and above’, and ‘5–10 years and 10 years and above’ for “transformational leadership style” were found to be 0.003, 1.000, and 0.000, respectively, it was observed that significant differences existed between teachers with ‘less than 5 years and 5–10 years’ ($p = 0.003$, $p < 0.01$), and between teachers with ‘5–10 years and 10 years and above’ ($p = 0.000$, $p < 0.001$). However, no significant difference was found between teachers with ‘less than 5 years and 10 years and above’ ($p = 1.000$) for “transformational leadership style.”

Further, from Table 4.6.3.4, it was quite evident that the mean scores for less than 5 years, 5–10 years, and 10 years and above of teaching experience for “transformational leadership style” were 15.58, 14.24, and 15.59, respectively. The mean of teachers with less than 5 years of teaching experience was found to be almost similar to that of teachers with 10 years and above, with both groups reporting similar mean scores. This implies that teachers with less than 5 years and those with 10 years and above of teaching experience did not differ in perceptions related to principal’s transformational leadership style, as was also evident from the mean scores in Table 4.6.3.4.

Further, from Table 4.6.3.4, it was quite evident that the mean scores for less than 5 years, 5–10 years, and 10 years and above of teaching experience for “transformational leadership style” were 15.58, 14.24, and 15.59, respectively. The mean of teachers with 10 years and above of teaching experience was found to be greater than that of teachers with 5–10 years of teaching experience for “transformational leadership style.” This implies that teachers with 10 years and above of teaching experience perceived their principals as exhibiting a greater extent of transformational leadership style compared to teachers with 5–10 years of teaching experience.

Further, the mean of teachers with less than 5 years of teaching experience was also found to be greater than that of teachers with 5–10 years of teaching experience for “transformational leadership style.” This implies that teachers with less than 5 years of teaching experience perceived their principals as exhibiting greater transformational

leadership style than teachers with 5–10 years of experience. The reason behind this may be that teachers with less than 5 years of experience are newer to the profession and may be more receptive, optimistic, and appreciative of inspirational leadership practices as they seek guidance and mentorship in the initial years of their career.

Finally, since the p-values for “transactional leadership style” and “laissez-faire leadership style” were found to be 0.615 and 0.755 respectively, that is, greater than 0.05, it was concluded that the assumption of homogeneity of variances was met for these leadership styles. Consequently, a one-way ANOVA was applied for analysing these dimensions.

Table 4.6.3.5 Summary of ANOVA for transactional leadership, and laissez-faire leadership styles

Leadership Styles		Sum of Squares	df	Mean Square	F	Sig.
TRN	Between Groups	116.591	2	58.29	7.609	0.00056*
	Within Groups	3424.63	447	7.66		
	Overall	3541.22	449			
LF	Between Groups	156.507	2	78.25	9.02	0.00014*
	Within Groups	3877.57	447	8.67		
	Overall	4034.08	449			

Note: “TRN=Transactional Leadership, LF=Laissez-faire leadership, *sign. at 0.05”

The above Table 4.6.3.5 demonstrates the results of ANOVA for transactional leadership and laissez-faire leadership styles across different groups of teaching experience. The F-values (7.609 and 9.02) for transactional and laissez-faire leadership styles were found to be statistically significant ($p = 0.00056$ and 0.00014) respectively. In the ANOVA table, the p-values being less than 0.05 indicated that the mean scores of all groups of the independent variable (teaching experience) were not the same. The ANOVA results suggested that for both transactional and laissez-faire leadership styles, the mean scores of the groups based on teaching experience differed significantly. Hence, it may be inferred that at least one category of independent variable differs significantly from other categories. Thus, for paired comparisons, in post hoc analysis Turkey method was applied (as in $p < 0.05$). The table 4.6.3.6 shows multiple comparisons using Turkey method for transactional and Laissez-faire leadership styles.

Table 4.6.3.6 Descriptive statistics for various dimensions of perceived leadership styles of principals

Leadership Styles		N	M	SD	SE	p-value
TRN	1	112	12.38	2.85	0.27	0.485
	2	140	12.31	2.66	0.22	
	2	140	12.31	2.66	0.22	0.0000 *
	3	198	11.31	2.79	0.19	
	1	112	12.38	2.85	0.27	0.003 *
	3	198	11.31	2.79	0.19	
LF	1	112	11.67	3.03	0.28	0.922
	2	140	11.57	2.85	0.24	
	2	140	11.57	2.85	0.24	0.0008 *
	3	198	10.43	2.95	0.21	
	1	112	11.67	3.03	0.28	0.0002 *
	3	198	10.43	2.95	0.21	

Note: "N=Number of participants, M=Mean, SD=Standard Deviation, SE=Standard Error, 1=less than 5 years, 2=5-10 years, and 3=10 years & above, TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership."

Table 4.6.3.6 shows the descriptive statistics for transactional and laissez-faire leadership styles, including the mean, standard deviation, standard error, and p-values across teaching experience groups (less than 5 years, 5–10 years, and 10 years and above).

The p values for teachers with (less than 5 years and 5–10 years), (5–10 years, and 10 years and above), (less than 5 years and 10 years and above) years of teaching experience for transactional leadership style was found to be 0.485, 0.0000, 0.003 respectively, while for laissez-faire leadership style the p values found were 0.922, 0.0008, and 0.0002 respectively.

The p values for (5–10 years, and 10 years and above), (less than 5 years and 10 years and above) were found to be significant for transactional leadership style ($p < 0.05$), while the p values for (5–10 years, and 10 years and above) and (less than 5 years and 10 years and above) were found to be significant for laissez-faire leadership style while for (less than 5 years and 5–10 years) the p values were found to be insignificant for both transactional and laissez-faire leadership styles.

Further, from Table 4.6.3.6, it is quite evident that the mean scores for “transactional leadership style” across teachers with ‘less than 5 years’, ‘5–10 years’,

and '10 years and above' of teaching experience were found to be 12.38, 12.31, and 11.31, respectively. The mean of teachers with less than 5 years of teaching experience was found to be greater than that of teachers with 10 years and above for "transactional leadership style". This implies that teachers with less than 5 years of teaching experience perceived their principals as exhibiting greater "transactional leadership style" in comparison to teachers with 10 years and above of teaching experience.

Further, the mean of teachers with 5–10 years of teaching experience ($M = 12.31$) was also found to be greater than that of teachers with 10 years and above ($M = 11.31$), indicating that teachers with 5–10 years of experience perceived their principals as exhibiting greater "transactional leadership style" compared to teachers with 10 years and above.

However, teachers with less than 5 years ($M = 12.38$) and 5–10 years ($M = 12.31$) of teaching experience did not differ substantially with respect to "transactional leadership style", as is also evident from the mean scores presented in Table 4.6.3.6. This implies that teachers with less than 5 years and 5–10 years of experience did not differ in their perception related to principals' transactional leadership style.

Similarly, for laissez-faire leadership style, it is evident from Table 4.6.3.6 that the mean scores for teachers with less than 5 years, 5–10 years, and 10 years and above were found to be 11.67, 11.57, and 10.43, respectively.

Teachers with less than 5 years ($M = 11.67$) and 5–10 years ($M = 11.57$) of experience did not differ substantially with respect to "laissez-faire leadership style", as is also evident from the mean scores. This implies that teachers with less than 5 years and 5–10 years of teaching experience did not differ in their perception related to their principals' "laissez-faire leadership style".

The mean of teachers with less than 5 years was found to be greater than that of teachers with 10 years and above for "laissez-faire leadership style". This implies that teachers with less than 5 years of experience perceived their principals as exhibiting greater "laissez-faire leadership style" than teachers with 10 years and above of experience.

Further, the mean of teachers with 5–10 years of experience ($M = 11.57$) was also found to be greater than that of teachers with 10 years and above ($M = 10.43$), indicating that teachers with 5–10 years of experience perceived their principals as

exhibiting greater “laissez-faire leadership style” compared to teachers with 10 years and above.

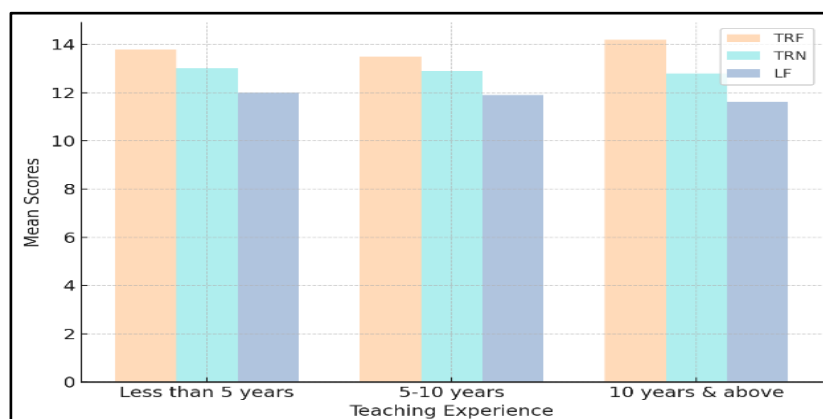


Figure 4.6.3. Mean scores of perceived leadership styles of principals with respect to teaching experience

Figure 4.6.3. depicts graphical representation of mean scores of ‘perceived leadership styles’ of principals, viz., ‘transformational,’ ‘transactional,’ and ‘laissez-faire’ leadership with respect to teaching experience.

Discussion of results

The significant Welch statistic value for “transformational leadership style” indicated significant differences among teachers with respect to teaching experience. Teachers with 10 years and above of experience perceived their principals as exhibiting a greater extent of transformational leadership style compared to teachers with 5–10 years of experience, possibly because they have a broader understanding of leadership qualities gained through professional experience. Similarly, teachers with less than 5 years of experience also perceived greater transformational leadership style than those with 5–10 years, likely because newer teachers are more receptive, optimistic, and appreciative of supportive leadership. Teachers with less than 5 years and 10 years and above of experience showed no difference in their perceptions of their principal’s transformational leadership style.

The significant F-values for “transactional leadership style” and “laissez-faire leadership style” indicated differences in perceptions across experience groups. Teachers with 5–10 years perceived greater transactional leadership style than those with 10 years and above, while teachers with less than 5 years and 10 years and above

perceived greater laissez-faire leadership style compared to their more experienced counterparts. These findings suggest that less experienced teachers were more likely to perceive their principals as exhibiting transactional or laissez-faire leadership styles, while teachers with longer experience perceived lesser transactional or laissez-faire leadership style characteristics.

Based on the foregoing discussion, it can be deduced that teachers with less than 5 years and 10 years and above of teaching experience perceived their principals as exhibiting greater transformational leadership style, while teachers with 5–10 years perceived lower transformational leadership style. This may be because newer teachers are more receptive and idealistic, and experienced teachers are better able to recognise transformational leadership qualities, whereas teachers with 5–10 years may be more critical or dissatisfied as they navigate increasing responsibilities and unmet professional needs. ‘Transformational leadership style’ refers to a leadership approach that inspires and motivates through a shared vision, encourages innovation, supports individual growth, and fosters an empowering school culture. The similarity in perceptions between teachers with less than 5 years and 10 years and above may reflect a combination of optimism and wisdom-the former grounded in hope and aspiration, and the latter grounded in experience and strategic insight, both aligning with the visionary and supportive aspects of transformational leadership.

On the basis of the foregoing discussion, it can also be concluded that teachers with ‘0–5 years,’ ‘5–10 years,’ and ‘10 years and above’ of teaching experience differed significantly in their perception of the principal’s “transactional leadership style”. Teachers with less than 5 years and 5–10 years perceived their principals as exhibiting greater transactional leadership style, possibly because they worked under closer supervision, received more directive leadership, and faced structured expectations as they established themselves professionally. “Transactional leadership style” refers to a leadership approach characterized by structured expectations, task-oriented directives, performance-based rewards, and corrective actions. In contrast, teachers with 10 years and above perceived lower transactional leadership style, likely because they operated with greater autonomy, required less oversight, and focused more on collaborative or developmental leadership. The absence of significant difference between teachers with

less than 5 years and 5–10 years suggests no difference in perceptions shaped by comparable early-career supervisory experiences.

Similarly, teachers with ‘less than 5 years,’ ‘5–10 years,’ and ‘10 years and above’ showed significant differences in their perception of laissez-faire leadership style. Teachers with less than 5 years and 5–10 years perceived greater laissez-faire leadership style, possibly reflecting unmet expectations for guidance, feedback, and involvement from leadership. In contrast, teachers with 10 years and above perceived lower laissez-faire leadership style, as they were more accustomed to self-directed work and interpreted autonomy as trust rather than neglect. ‘Laissez-faire leadership style’ is typically characterised by avoidance of decision-making, lack of involvement, and a passive leadership approach. No difference in perceptions between teachers with less than 5 years and 5–10 years suggests shared expectations for leadership involvement during the earlier stages of their careers.

Thus, from the results, it can be concluded that Hypothesis 1(c), which states that “there exists no significant difference in perceived leadership styles of principals with respect to teaching experience,” is not accepted.

These findings align with previous studies. Bass and Avolio (1994) suggested that younger or less experienced teachers were more receptive to transformational leadership, as it aligns with their need for inspiration and support. Hoy and Miskel (2008) proposed that transactional leadership might appeal to mid-career teachers, as they focus on structured growth and task completion. Judge and Piccolo (2004), however, indicated that laissez-faire leadership was generally perceived negatively across all groups, with dissatisfaction increasing with experience. Leithwood and Jantzi (2006) emphasised that transformational leadership fosters trust and motivation, resonating more with early-career teachers.

Hypothesis1 (d): “There exists no significant difference in perceived leadership styles of principals with respect to type of school”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.6.4), on the basis of type of school.

4.6.4 Results relating to differences in perceived leadership styles of principals with respect to type of school

Table 4.6.4 Mean scores of perceived leadership styles with respect to type of school

Leadership Styles	School Type	N	Mean	SD	t-value
TRF	GOVT	175	15.55	3.35	1.97*
	PVT	275	14.92	3.28	
TRN	GOVT	175	11.38	2.70	3.1**
	PVT	275	12.21	2.83	
LF	GOVT	175	10.67	2.95	2.41*
	PVT	275	11.36	2.99	

Note: "N=number of respondents, T=Type of school, M=mean, SD=standard deviation, TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership." ** sign. at 0.01, *sign. at 0.05.

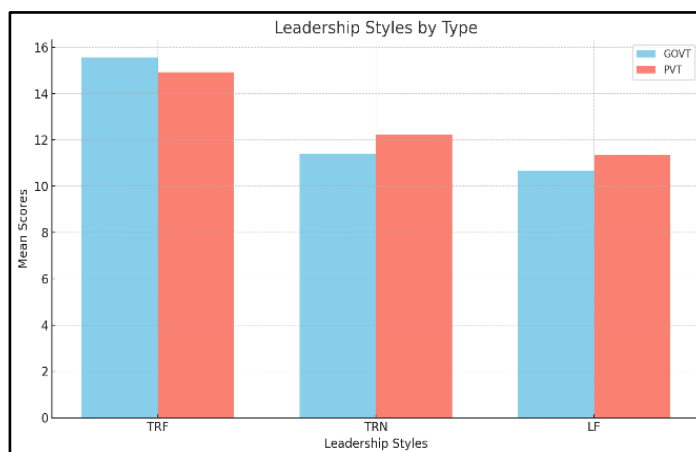


Figure 4.6.4. Mean scores of perceived leadership styles of principals with respect to type of school

Table 4.6.4 presents the mean scores and standard deviation of different leadership styles- 'transformational,' 'transactional,' and 'laissez-faire' as perceived by teachers teaching in government and private schools.

The mean scores of 'transformational,' 'transactional,' and 'laissez-faire' leadership styles were found to be 15.55, 11.38, and 10.67 for teachers teaching in government schools, and 14.92, 12.21, and 11.36 for teachers teaching in private schools respectively.

The standard deviations of 'transformational,' 'transactional,' and 'laissez-faire' leadership styles were 3.35, 2.70, and 2.95 for teachers teaching in government schools, and 3.28, 2.83, and 2.99 for teachers teaching in private schools respectively.

Further, the t-values calculated for 'transformational,' 'transactional,' and 'laissez-faire' leadership styles as perceived by teachers teaching in government and private schools were found to be 1.97, 3.10, and 2.41, respectively. The t-values were

found to be significant at 0.05 level for transformational and laissez-faire leadership style while transactional leadership style was significant at 0.01 level.

Discussion of results

The significant t-values showed that there were significant differences in the perceived leadership styles of principals for teachers teaching in government and private schools. The observation of mean scores for transformational leadership style indicated that teachers teaching in government schools reported higher mean scores compared to teachers teaching in private schools. While for transactional, and laissez-faire leadership styles teachers teaching in private schools scored more than their government counterparts.

As a result, it can be inferred that teachers teaching in government schools perceived their principals as exhibiting greater transformational leadership style, characterised by inspiring and motivating employees, fostering innovation, and encouraging personal and professional growth. While, teachers teaching in private schools perceived their principals as demonstrating greater transactional leadership style, that is, emphasised structured tasks, rewards, and penalties to maintain performance expectations, and greater laissez-faire leadership styles characterised by a hands-off approach, minimal supervision, and limited direct involvement in decision-making.

Thus, based on the results, it was concluded that the hypothesis 1(d) which states that “there exists no significant difference in perceived leadership styles of principals with respect to type of school” is not accepted.

These findings align with the study by Kumari and Goel (2024), which concluded that public school teachers perceived their principals as exhibiting more transformational than transactional leadership style. The results indicated that government school teachers perceived ‘transformational leadership’ as more prevalent, while private school teachers experienced higher levels of ‘transactional and laissez-faire leadership styles’ indicating that school type plays a significant role in shaping perceptions of leadership styles. In the current context, government school teachers tend to perceive leadership as more transformational, possibly reflecting relatively secure roles, resulting in less stress, whereas private school teachers, operating under higher

performance and accountability demands, perceive it as more transactional and laissez-faire, indicating comparatively reduced autonomy, limited participative decision-making, and less emphasis on relational leadership practices.

4.7 Comparison of level of burnout with respect to gender, locality, teaching experience and type of school

Hypothesis 2(a): “There exists no significant difference in level of burnout among secondary school teachers with respect to gender.”

The hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.7.1, on the basis of gender.

4.7.1 Results relating to difference of levels of burnout of teachers with respect to gender

To test the significance of differences in the levels of ‘burnout’ of teachers with respect to gender, the data was segregated into two levels (high and low) as shown in the following table 4.7.1.

Table 4.7.1 Mean scores of levels of burnout of teachers with respect to gender

Levels of Burnout	Gender	N	M	SD	t-value
High	Male	21	70.05	5.89	4.83**
	Female	55	75.58	3.77	
Low	Male	119	40.29	12.22	3.81**
	Female	158	35.61	8.15	

*Note: “N=number of respondents, T=Type of school, M=mean, SD=standard deviation, ** sign. at 0.01*

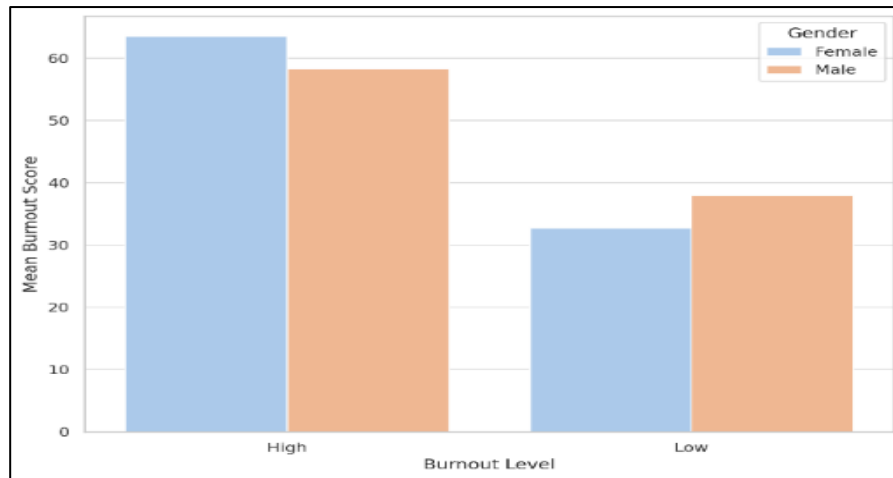


Figure 4.7.1 Mean scores of levels of burnout of teachers with respect to gender

As shown in Table 4.7.1, the mean scores of male and female teachers at high burnout level was found to be 70.05 and 75.58 respectively, while the mean scores of male and female teachers at low burnout level were found to be 40.29 and 35.61 respectively.

The standard deviation for male and female at high burnout level was found to be 5.89 and 3.77 respectively. The standard deviation for male and female teachers at low burnout level was found to be 12.22 and 8.15 respectively.

At high burnout level, the t-value was 4.83, and at low burnout level, it was 3.81, both significant at 0.01 level.

Discussion of results:

The significant t-values showed that there exist significant differences in the levels of burnout (high and low) between male and female teachers. The observation of mean scores at high burnout level showed that female teachers scored more as compared to male teachers. Conversely, at the low burnout level, male teachers scored more than their female counterparts.

As a result, it can be inferred that female teachers experienced greater burnout when experiencing intense stress, while male teachers showed higher burnout even in low-stress situations. The findings indicated that gender significantly influences burnout levels among teachers. These patterns reflect distinct gender-based responses to burnout experience. In the present context, female teachers usually balance professional and caregiving responsibilities, which can heighten stress and increase burnout under demanding conditions, whereas male teachers may experience a more

constant underlying strain, leading to relatively higher burnout even at lower stress levels.

Therefore, Hypothesis 2(a), which states that “There exists no significant difference in level of burnout among secondary school teachers with respect to gender,” is not accepted.

These findings align with prior research of Purvanova and Muros (2010) revealed that female teachers reported higher levels of emotional exhaustion, while male teachers exhibited greater depersonalisation. The results suggested that women were more susceptible to emotional fatigue, whereas men tended to develop a detached attitude towards their work. However, Maslach et al. (2016) reported that while burnout was prevalent across genders, contextual factors such as workload, support systems, and teaching conditions were more influential than gender alone. Skaalvik and Skaalvik (2017) emphasised that burnout among teachers was primarily influenced by environmental stressors rather than gender differences. Stengard et al. (2022), in their longitudinal study on Swedish teachers, found that while work and home spheres may differ slightly between genders, these differences did not significantly impact overall burnout levels or depressive symptoms.

Hypothesis 2(b): “There exists no significant difference in level of burnout among secondary school teachers with respect to locality”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table 4.7.2, on the basis of locality.

4.7.2 Results relating to differences in levels of burnout of teachers with respect to locality

To test the significance of differences in the levels of ‘burnout’ of teachers teaching in urban and rural secondary schools, the data was segregated into two levels- high and low as shown in the following table 4.7.2.

Table 4.7.2 Mean scores of levels of burnout with respect to locality

Burnout Level	Locality	N	M	SD	t-value
High	Urban	55	75.58	5.89	4.83**
	Rural	21	70.05	3.77	
Low	Urban	48	40.98	9.26	2.66**
	Rural	229	36.92	11.09	

Note: “N=number of respondents=mean, SD=standard deviation, ** sign. at 0.01

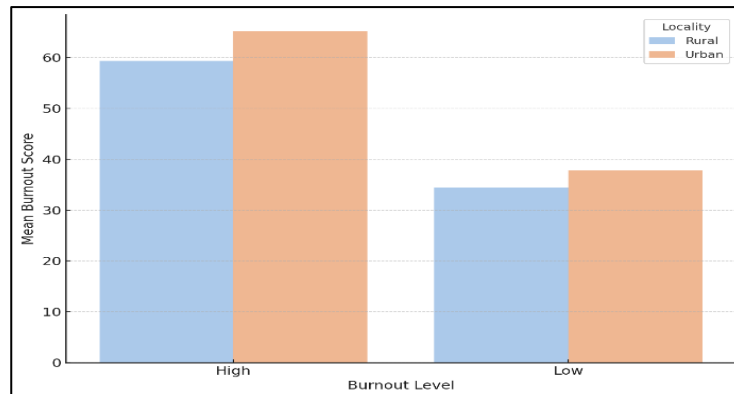


Figure 4.7.2 Mean scores of levels of burnout of teachers with respect to locality

As shown in Table 4.7.2, the mean scores of teachers teaching in urban and rural secondary schools at high burnout level were found to be 75.58 and 70.05 respectively, while the mean scores of teachers teaching in urban and rural secondary schools at low burnout level were found to be 40.98 and 36.92 respectively.

The standard deviation for teachers teaching in urban and rural secondary schools at high burnout level was found to be 5.89 and 3.77 respectively. The standard deviation for teachers teaching in urban and rural secondary schools at low burnout level was found to be 9.26 and 11.09 respectively.

At high burnout level, the t-value was 4.83, and at low burnout level, it was 2.66, both significant at 0.01 level.

Discussion of results:

The significant t-values showed that there exist significant differences in levels of burnout of teachers teaching in urban and rural secondary schools. The observation of mean scores revealed that teachers teaching in urban secondary schools reported higher burnout levels than their rural school counterparts both at high and low burnout levels. This indicated that teachers in urban schools experienced more pronounced symptoms of burnout regardless of intensity. These differences may be attributed to the greater pressures, workloads, and contextual demands faced in urban teaching environments. Therefore, Hypothesis 2(b), which states that “There exists no significant difference in level of burnout among secondary school teachers with respect to locality,” is not accepted.

These findings align with previous research emphasising the higher levels of burnout among teachers teaching in urban secondary schools. Abel and Sewell (1999)

found that teachers teaching in urban secondary schools in the United States experienced higher stress levels due to demanding work environments. Hakanen et al. (2011) emphasised that contextual factors in Finland, such as the challenging conditions of urban teaching, significantly influenced teacher burnout. Milfont et al. (2008) reported that teachers teaching in urban schools in New Zealand experienced higher burnout levels as compared to their rural counterparts. Skaalvik and Skaalvik (2017) highlighted that teachers teaching in urban schools in Norway faced greater workloads, larger class sizes, and increased administrative demands, which contributed to higher burnout levels. In Assam's context, probably the urban schools, characterised by higher enrolment and intensified institutional responsibilities, such as managing larger class sizes, increased student diversity, heightened parental expectations, frequent evaluations, and performance-related accountability, place greater stress on teachers, whereas rural schools, with comparatively lower pressures, tend to report lower burnout.

Hypothesis 2(c): “There exists no significant difference in level of burnout among secondary school teachers with respect to teaching experience”.

The hypothesis was examined by using one-way ANOVA and the results have been shown in Tables (4.7.3.1, 4.7.3.2, 4.7.3.3, 4.7.3.4, 4.7.3.5, 4.7.3.6, 4.7.3.7) on the basis of teaching experience.

In order to test this hypothesis, and to find out whether teachers at low and high burnout level differ with respect to teaching experience, the respondents were divided into three groups, namely, ‘less than 5 years,’ ‘5-10 years,’ and ‘10 years and above’ and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test for both low and high levels individually.

4.7.3 Results relating to differences in levels of burnout of teachers with respect to teaching experience

In order to test this hypothesis, and to find out whether teachers at high burnout level differ with respect to teaching experience-‘less than 5 years,’ ‘5-10 years,’ and ‘10 years and above’ homogeneity of variances was checked through Levene's test.

Table 4.7.3.1 Test of homogeneity of variances for teachers at high burnout level with respect to years of experience

High Burnout	Levene Statistic	df1	df2	Sig.
	0.449	2	73	0.64

Table 4.7.3.1 presented the results of Levene's test for high burnout across different categories of teaching experience. The p-value for high burnout was 0.64, which was found to be greater than 0.05. This indicated that the assumption of homogeneity of variances was met, suggesting that the variances across the compared groups were not significantly different. Therefore, equal variances were assumed, and it was appropriate to proceed with a one-way ANOVA to analyse burnout level across the groups.

Table 4.7.3.2 Summary of ANOVA for teachers at high burnout level with respect to teaching experience

HIGH BURNOUT					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	192.312	2	96.156	2.887	0.062
Within Groups	2431.477	73	33.308		
Total	2623.789	75			

The ANOVA results, as shown in Table 4.7.3.2, indicated that there was no statistically significant difference in high burnout levels across teaching experience groups, $F(2, 73) = 2.887$, $p = .062$. Since the p-value was greater than 0.05, this suggested that teachers with different years of teaching experience ('less than 5 years,' '5-10 years,' and '10 years and above') did not differ significantly in their levels of high burnout. Therefore, post hoc comparisons were not required, as the overall difference was not statistically significant.

Table 4.7.3.3 Descriptive statistics for teachers at high burnout level with respect to teaching experience

Descriptives					
		N	Mean	SD	SE
High Burnout	1	20	76.40	4.90	1.09
	2	23	74.26	5.15	1.07
	3	33	72.48	6.59	1.14

Note: N=Number of participants, SD=Standard Deviation, SE=Standard Error, 1=less than 5 years, 2=5-10 years, and 3=10 years & above

The descriptive statistics, as shown in Table 4.7.3.3, indicated that teachers with less than 5 years of teaching experience reported a mean high burnout score of 76.40 (SD = 4.90), those with 5–10 years of experience reported a mean score of 74.26 (SD = 5.15), and teachers with 10 years and above reported a mean score of 72.48 (SD = 6.59). Although the mean scores suggested that teachers with fewer years of teaching experience tended to report slightly higher levels of high burnout compared to their more experienced counterparts, the overall ANOVA confirmed that these differences were not statistically significant ($p = .062$).

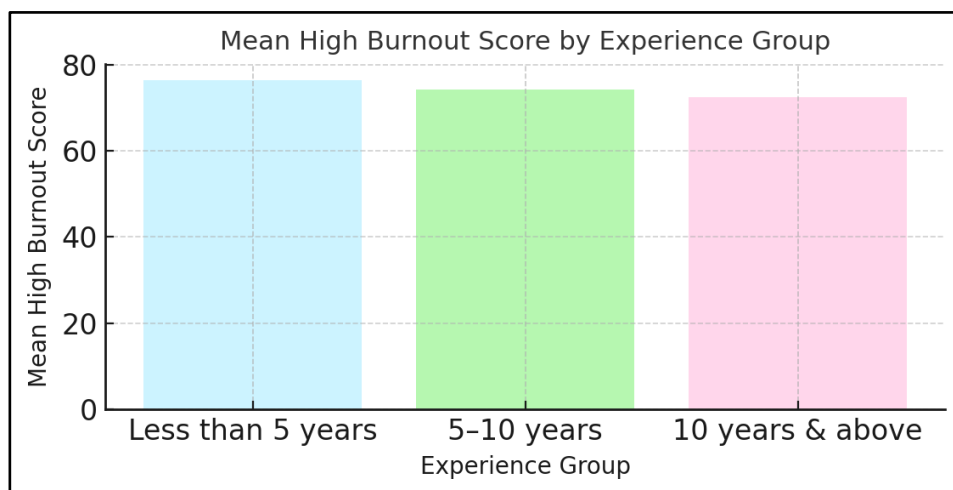


Figure 4.7.3.1 Mean scores of teachers at high burnout level with respect to teaching experience

Discussion of results

The insignificant F-value from ANOVA revealed statistically no significant differences at high burnout level across the three experience groups. This finding suggested that, although some numerical differences existed between groups, teaching experience did not significantly differ at high burnout level. In other words, high burnout did not differ among teachers regardless of their years of teaching experience.

To further examine the same hypothesis, and to find out whether teachers at low burnout level differ with respect to teaching experience-‘less than 5 years,’ ‘5-10 years,’ and ‘10 years and above’ homogeneity of variances was checked through Levene’s test.

Table 4.7.3.4 Test of homogeneity of variances for teachers at low burnout level with respect to years of experience

Low Burnout	Levene Statistic	df1	df2	Sig.
	4.364	2	274	0.014

The table 4.7.3.4 presented the results of Levene's test for low burnout across different categories of teaching experience. Since the p-value (0.014) was less than 0.05, the assumption of homogeneity of variances was violated, indicating that variances were unequal. Hence, the Welch test should be applied for analysing the differences in low burnout levels across teaching experience groups.

Table 4.7.3.5 Robust Tests of equality of means for teachers at low burnout level with respect to years of experience

		L. Statistic	df1	df2	Sig.
Low Burnout	Welch	6.563	2	170.211	0.002

The above table 4.7.3.5 shows the differences for low burnout of teachers with respect to teaching experience, namely- 'less than 5 years,' '5-10 years,' and '10 years and above'. The value of Welch Statistic for low burnout was found to be 6.563. The p-value for low burnout was found to be less than 0.05 ($p = 0.002$), hence it can be inferred that at least one category of independent variable differs significantly from other categories. This suggested that at low burnout level teachers differed with respect to teaching experience. Thus, for paired comparisons, in post hoc analysis, the Games-Howell method should be applied.

Table 4.7.3.6 Multiple comparisons for teachers at low burnout level with respect to years of experience

	Tch Exp	Tch Exp	Mean Difference	Std. Error	Sig.
Low Burnout	1	2	5.422*	1.556	0.002
		3	3.878*	1.501	0.029
	2	1	-5.422*	1.556	0.002
		3	-1.544	1.548	0.579
	3	1	-3.878*	1.501	0.029
		2	1.544	1.548	0.579

Note: 1=less than 5 years, 2=5-10 years, and 3=10 years & above, Tch Exp =Teaching Experience ** sign. at 0.01, *sign. at 0.05.

Table 4.7.3.7 Descriptive statistics for teachers at low burnout level with respect to years of experience

Descriptives					
		N	Mean	SD	SE
Low Burnout	1	62	41.18	8.40	1.06
	2	98	35.76	11.20	1.13
	3	117	37.30	11.42	1.05

Note: 1=less than 5 years, 2=5-10 years, and 3=10 years & above, SD=Standard Deviation, SE=Standard Error

The results, as shown in Table 4.7.3.6, indicated statistically significant differences between teachers with less than 5 years and 5–10 years of experience ($p = 0.002$, $p < 0.01$), as well as between teachers with less than 5 years and 10 years and above of experience ($p = 0.029$, $p < 0.05$). This suggests that early-career teachers reported significantly higher levels of low burnout compared to their more experienced counterparts. However, the difference between teachers with 5–10 years and 10 years and above was not statistically significant ($p = 0.579$, $p > 0.05$), indicating that both these groups experienced similar levels of low burnout.

The descriptive statistics, as shown in table 4.7.3.7, indicated that teachers with less than 5 years of experience reported a mean low burnout score of 41.18 ($SD = 8.40$), those with 5–10 years of experience reported a mean of 35.76 ($SD = 11.21$), while teachers with 10 years and above reported a mean of 37.30 ($SD = 11.42$). The mean scores of teachers with less than 5 years of experience were greater than that of teachers with 5–10 years of experience as well as from teachers with 10 years and above. This implies that higher levels of low burnout compared to their more experienced counterparts. The Games-Howell results confirmed that low burnout was primarily higher among teachers with less than 5 years of teaching experience compared to both mid-career (5–10 years) and senior (10 years and above) teachers, whereas the latter two groups did not differ significantly from each other.

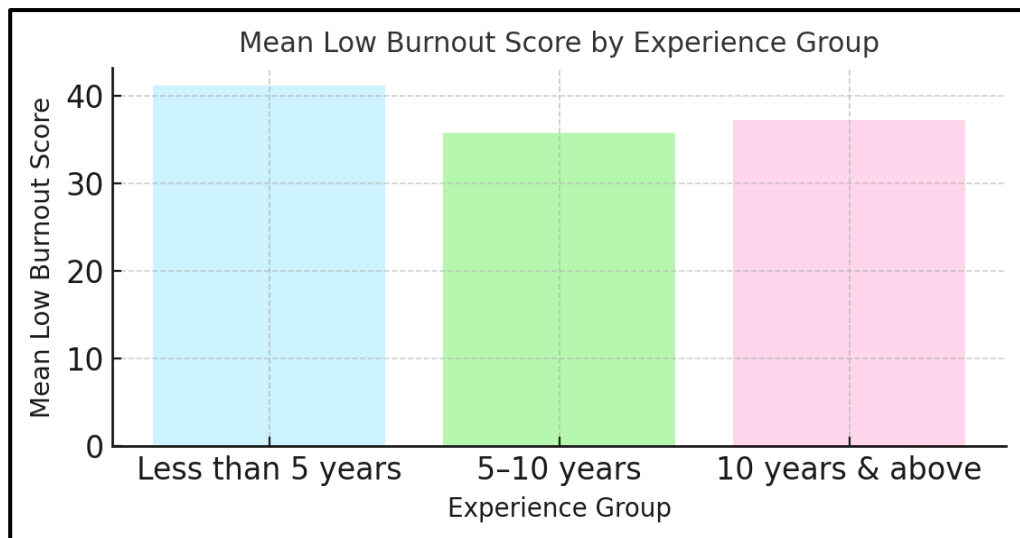


Figure 4.7.3.2 Mean scores of teachers at low burnout level with respect to teaching experience

Discussion of Results

The significant Welch Statistic for teachers at low burnout level revealed statistically significant differences across the three experience groups. Teachers with less than 5 years of teaching experience reported higher levels of low burnout compared to those with 5–10 years and 10 years and above of experience. However, the differences between teachers with less than 5 years and those with 10 years and above, as well as between teachers with 5–10 years and 10 years and above, were not statistically significant, indicating that both mid-career and senior teachers experienced similar levels of low burnout.

These findings suggested that the early years of teaching are particularly vulnerable to low level of burnout due to challenges of adjustment, workload, and limited coping mechanisms. With mid-level teaching experience (5–10 years), teachers likely develop greater professional competence, confidence, and classroom management skills, leading to lesser low burnout. In contrast, teachers with 10 years and above reported slightly higher low burnout compared to mid-career teachers, possibly due to accumulated job stress and long-term professional fatigue balancing out the benefits of experience.

Based on the foregoing discussion, it can be concluded that the hypothesis stating that “There exists no significant difference in level of burnout among

secondary school teachers with respect to teaching experience” is accepted to some extent (accepted for high burnout level, while was not accepted for low burnout level).

Teachers at the high-burnout level reported similar scores across all experience groups, indicating that burnout was widespread irrespective of teaching tenure. This finding suggested that factors beyond experience-such as working conditions, organisational climate, or leadership practices-might have exerted a stronger influence on burnout intensity. In contrast, teachers at the low-burnout level showed significant variation across experience groups, suggesting that teaching experience played a meaningful role in shaping burnout in this dimension. Early-career teachers (less than 5 years) experienced higher burnout compared to mid-career and senior teachers, likely due to workload pressures, adjustment difficulties, and limited coping mechanisms. Mid-career teachers exhibited comparatively lower burnout, reflecting increased stability and professional adaptation, while those with longer experience showed a slight rise, possibly linked to cumulative job fatigue. Overall, these results indicated that while high burnout affected teachers across all experience levels, low burnout varied significantly with teaching experience, underscoring the importance of supportive organisational practices and positive school environments in reducing burnout across different career stages.

The findings of the present study are generally consistent with previous research examining the relationship between teaching experience and burnout across different career stages. Several studies have highlighted that early-career teachers tend to be more vulnerable to burnout due to limited coping resources, greater adjustment demands, and challenges in managing classroom and institutional expectations. Milfont et al. (2008) and Skaalvik and Skaalvik (2017) reported that novice teachers experience heightened emotional exhaustion and stress as they adapt to professional responsibilities. In contrast, Maslach et al. (2016) observed that mid-career teachers (5–10 years) generally exhibit lower burnout levels owing to improved coping mechanisms, professional confidence, and better adaptation to the teaching environment. However, Gavish and Friedman (2010) noted that teachers with longer professional tenure may experience a gradual resurgence of burnout symptoms as a result of accumulated job fatigue, role stagnation, and emotional detachment. The present findings are, therefore, reinforce that early-career teachers remain the most

susceptible to burnout, mid-career teachers the most resilient, and senior teachers may again encounter increased burnout due to prolonged exposure to occupational stress.

Hypothesis 2(d): “There exists no significant difference in level of burnout among secondary school teachers with respect to type of school.”

The hypothesis was examined by using independent sample t-test and the results have been shown in Tables (4.7.4), on the basis of type of school.

4.7.4 Results relating to differences in levels of burnout of teachers with respect to type of school

To test the significance of differences in the levels of ‘burnout’ of teachers teaching in private and government secondary schools, the data was segregated into two levels (high and low burnout) as shown in the following. table 4.7.4.

Table 4.7.4 Mean scores of levels of burnout of teachers with respect to type of school

Burnout Level	School Type	N	M	SD	t-value
High	Private	21	70.05	3.77	4.83**
	Government	55	75.58	5.89	
Low	Private	138	39.43	9.15	2.78**
	Government	139	35.83	12.15	

Note: “N=number of respondents, M=mean, SD=standard deviation, ** sign. at 0.01

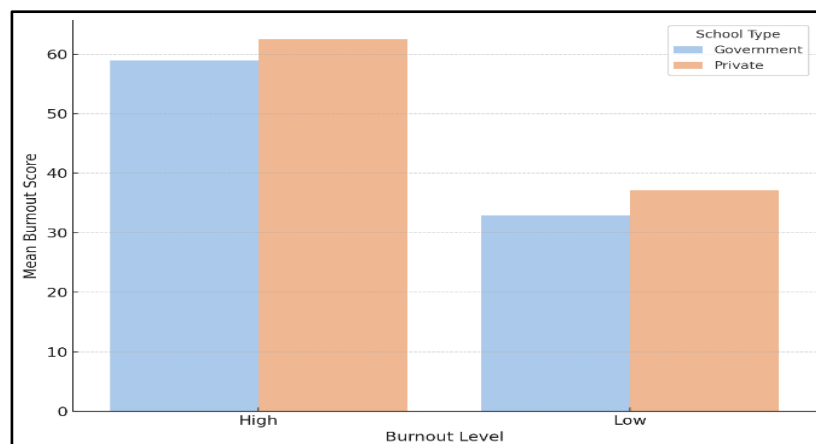


Figure 4.7.4 Mean scores of levels of burnout of teachers with respect to type of school

As shown in Table 4.7.4, the mean scores of teachers teaching in private and government secondary schools at high burnout level were found to be 70.05 and 75.58 respectively, while the mean scores of teachers teaching in private and government secondary schools at low burnout level were found to be 39.43 and 35.83 respectively.

The standard deviation for teachers teaching in private and government secondary schools at high burnout level was found to be 3.77 and 5.89 respectively. The standard deviation for teachers teaching in private and government secondary schools at low burnout level was found to be 9.15 and 12.15 respectively.

At high burnout level, the t-value found was 4.83, and at low burnout level, it was 2.78, both significant at 0.01 level.

Discussion of results:

The significant t-values indicated that there exist significant differences in the levels of burnout (high and low) between teachers teaching in private and government schools. The observation of mean scores revealed that at high burnout level, teachers teaching in government schools reported greater burnout than teachers teaching in private schools. In contrast, at low burnout level, teachers teaching in private schools reported greater burnout compared to teachers teaching in government schools. These differences may be attributed to variations in work demands, performance expectations, and institutional support between private and government schools. Based on the results, Hypothesis 2(d), which states that “There exists no significant difference in level of burnout among secondary school teachers with respect to type of school,” is not accepted.

The above findings aligned with previous research, which suggested that teachers teaching in private secondary schools were more susceptible to burnout due to their work environment and organisational challenges. Singh & Dwivedi (2019) emphasised that inadequate coping mechanisms and lack of organisational support contributed to higher burnout among private school teachers. Chaurasiya & Naaz (2022) found that private secondary school teachers reported significantly higher occupational stress, a precursor to burnout, compared to their government counterparts. Skaalvik and Skaalvik (2017) highlighted that while teachers teaching in private

schools experienced burnout due to workload and performance pressures, teachers teaching in government secondary schools also faced burnout due to larger class sizes and limited resources. Pandey, (2020) observed higher professional burnout levels among private school teachers, attributing this to increased workload and job insecurity. In the current context, private schools, driven by performance pressures and lower job security, create persistent strain even at lower burnout levels, whereas government schools, despite greater stability, operate within systemic constraints like rigid bureaucratic procedures, additional non-teaching duties, policy-driven compliance requirements, and limited flexibility in decision-making, which intensify stress and contribute to higher burnout at elevated levels.

4.8 Comparison of frequency and forms of workplace bullying with respect to gender, locality, teaching experience and type of school

Hypothesis 3(a): “There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to gender”.

The hypothesis was examined by using chi square test and independent sample t-test and the results have been shown in Table (4.8.1,4.8.2), on the basis of gender.

4.8.1 Results relating to differences in frequency of workplace bullying of teachers with respect to gender

Table 4.8.1 Chi-Square Test for Independence between frequency of workplace bullying and gender

Frequency of Workplace Bullying	Gender		
	Male (N)	Female (N)	Total (N)
Only Rarely	77	75	152
Now and then	5	29	34
Total	82	104	186
Note. $\chi^2(1, N = 186) = 14.57, p < .001, \phi = .28$			

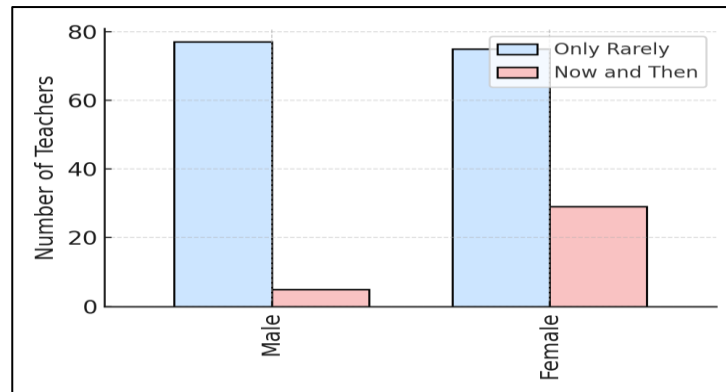


Figure 4.8.1 Frequency of workplace bullying with respect to gender

A chi-square test of independence was conducted to examine the relationship between frequency of workplace bullying of teachers and gender.

The results indicated a statistically significant association at .05 level, $\chi^2(1, N=186) = 14.57$, $p < .001$, with a moderate effect size ($\phi = .28$). All expected cell frequencies were above 5, satisfying the assumption for chi-square analysis. The observed frequencies showed that a higher proportion of female teachers ($N=29$) (27.9%) reported now and then bullying compared to male teachers ($N=5$) (6.1%). Further observed frequencies showed that a higher proportion of male teachers ($N=77$) (93.9 %) reported “Only Rarely” bullying compared to female teachers ($N=75$) (72.1%). 29 (27.9 %) female teachers experienced now and then bullying, compared to 5 (6.09%) male teachers.

This pattern reflected a gender-based difference in the frequency of workplace bullying among teachers, and the association was found to be statistically significant. The result was supported by the Pearson Chi-Square Test ($\chi^2 = 14.57$, $p < .001$), which indicated a highly significant association between gender and workplace bullying frequency.

This pattern reflected a clear gender-based difference in the frequency of workplace bullying among teachers. The Pearson Chi-Square Test ($\chi^2 = 14.57$, $p < .001$) indicated a highly significant association between gender and workplace bullying frequency. The Continuity Correction Test ($p < .001$) was applied to adjust for the 2×2 contingency table, and the Likelihood Ratio Test ($p < .001$) further confirmed this association. Since all reported p -values were well below .05, the findings collectively

confirmed that gender was significantly associated with the frequency of workplace bullying among teachers.

Discussion of results

These findings suggested a significant association between workplace bullying frequency and gender, indicating that female teachers were significantly more likely to experience repeated instances of bullying compared to their male counterparts i.e., there were significant differences in the frequency of workplace bullying across males and females.

4.8.2 Results relating to differences in forms of workplace bullying of teachers with respect to gender

Table 4.8.2 Mean scores of forms of workplace bullying of teachers with respect to gender

Workplace Bullying	Gender	N	M	SD	t-value
PR	Male	183	16.98	4.55	2.149*
	Female	267	18.01	5.28	
WR	Male	183	18.06	4.25	2.061*
	Female	267	19.21	6.64	
PI	Male	183	7.5	1.98	2.094*
	Female	267	8.03	3.05	

Note: N=number of respondents, M=mean, SD= standard deviation, PR=Person-related bullying, WR= Work-related bullying, PI=Physically intimidating bullying, ** sign. at 0.01, *sign. at 0.05.

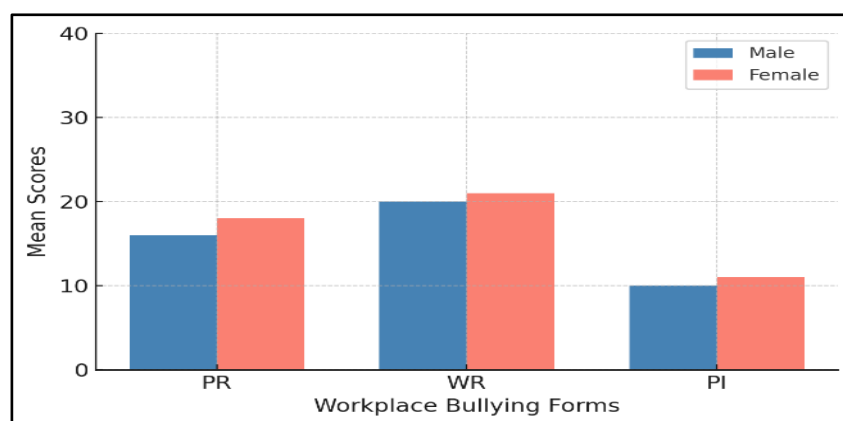


Figure 4.8.2 Mean scores of forms of workplace bullying of teachers with respect to gender

As presented in Table 4.8.2, for person-related bullying, male teachers reported a mean score of 16.98, while female teachers reported a mean score of 18.01. For work-

related bullying, the mean score was 18.06 for male teachers and 19.21 for female teachers. In the case of physically intimidating bullying, the mean scores were 7.5 for male teachers and 8.03 for female teachers.

The SD for person-related bullying among male teachers was found to be 4.55, and for female teachers was found to be 5.28. For work-related bullying, the SD was found to be 4.25 for male teachers and 6.64 for female teachers. In the case of physically intimidating bullying, the SD was found to be 1.98 for male teachers and 3.05 for female teachers.

Further, the t-values calculated for different forms of bullying between male and female teachers were found to be 2.149 for person-related bullying, 2.061 for work-related bullying, 2.094 for physically intimidating bullying. All the t-values were found to be statistically significant at 0.05 level, confirming that the differences in bullying experiences between male and female teachers were statistically significant.

Discussion of results

The significant t-values indicated statistically significant differences in person-related, work-related, and physically intimidating bullying between male and female teachers. Female teachers consistently reported higher mean scores across all dimensions, suggesting that they experienced greater person-related bullying involving behaviours that target the individual's personal life or self-concept, such as gossip, humiliation, or social exclusion, which undermine self-esteem and interpersonal standing; work-related bullying involving persistent acts that interfere with professional responsibilities, including unreasonable deadlines, withholding of essential information, or questioning of competence and physically intimidating bullying involving threatening gestures, invasion of personal space, or acts of aggression that create an atmosphere of fear and insecurity for the victim as compared to their male counterparts. Further, the Chi square test of independence revealed a significant association between frequency of workplace bullying and gender

These findings highlighted that gender played a critical role in workplace bullying among teachers, with female teachers facing more personal attacks, professional mistreatment, and physical intimidation.

On the basis of the above, it can be concluded that the hypotheses 03(a) which states that “there exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to gender” is not accepted.

Hypothesis 3(b): “There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to locality”.

The hypothesis was examined by using chi square test and independent sample t-test and the results have been shown in Table (4.8.3, 4.8.4), on the basis of locality.

4.8.3 Results relating to differences in frequency of workplace bullying of teachers with respect to locality

Table 4.8.3 Chi-Square Test for Independence between frequency of workplace bullying and locality

Frequency of Workplace Bullying	Locality		
	Rural (N)	Urban (N)	Total (N)
Only Rarely	103	49	152
Now and Then	28	6	34
Total	131	55	186
Note. $\chi^2(1, N = 186) = 2.84, p = .092$			

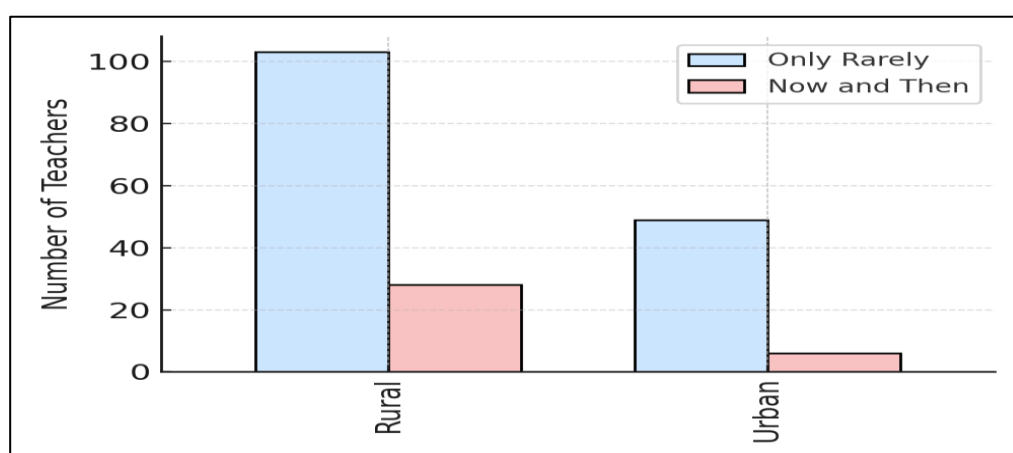


Figure 4.8.3 Frequency of workplace bullying with respect to locality

A chi-square test of independence was conducted to examine the relationship between frequency of workplace bullying of teachers and locality. The results indicated no statistically significant association at .05 level, $\chi^2(1, N = 186) = 2.84, p = .092$, with

no effect size reported. All expected cell frequencies were above 5, satisfying the assumption for chi-square analysis. The observed frequencies showed that a higher proportion of teachers teaching in rural secondary schools (N = 28; 21.4%) reported “Now and Then” bullying compared to teachers teaching in urban secondary schools (N = 6; 10.9%). Further observed frequencies showed that a higher proportion of teachers teaching in urban secondary schools (N = 49; 89.1%) reported “Only Rarely” bullying compared to teachers teaching in rural secondary schools (N = 103; 78.6%).

This pattern reflected a noticeable locality-based variation in the frequency of workplace bullying; however, the association was not statistically significant. The Pearson Chi-Square Test ($\chi^2 = 2.84$, $p = .092$) indicated the absence of a significant relationship between workplace bullying frequency and locality. To further ensure robustness, supplementary tests were also examined. The Continuity Correction Test ($p = .106$), applied to adjust for the 2×2 contingency table, confirmed the non-significant association. Similarly, the Likelihood Ratio Test ($p = .094$) produced consistent results, supporting the conclusion that locality did not significantly influence the frequency of workplace bullying. Hence, all tests collectively indicated that the frequency of workplace bullying did not differ significantly with respect to locality, suggesting that teachers in rural and urban schools reported comparable experiences of workplace bullying.

Discussion of results

These findings suggested no significant association between the frequency of workplace bullying and locality, indicating that teachers teaching in rural and urban secondary schools did not differ significantly in terms of how often they experienced bullying. Although the observed frequencies pointed towards some variation, with rural teachers reporting bullying “now and then” more often and urban teachers more frequently reporting “only rarely,” these differences were not statistically significant. In other words, the chi-square test confirmed that locality did not play a decisive role in determining the frequency of workplace bullying among teachers.

4.8.4 Results relating to differences in forms of workplace bullying of teachers with respect to locality

Table 4.8.4 Mean scores of forms of workplace bullying of teachers with respect to locality

Workplace Bullying	Locality	N	M	SD	t-value
PR	Rural	332	17.02	4.83	4.188 **
	Urban	118	19.23	5.21	
WR	Rural	332	17.32	4.34	9.498 **
	Urban	118	22.73	7.4	
PI	Rural	332	7.3	2.1	7.302 **
	Urban	118	9.28	3.48	

Note: N=number of respondents, M=mean, SD= standard deviation, PR= Person-related bullying, WR= Work-related bullying, PI= Physically intimidating bullying, ** sign. at 0.01, *sign. at 0.05.

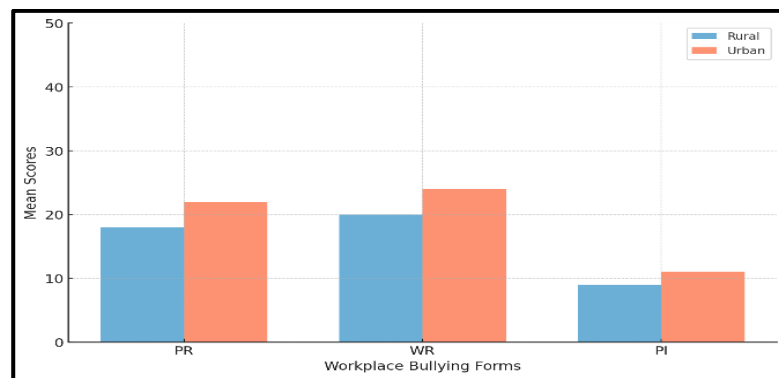


Figure 4.8.4 Mean scores of forms of workplace bullying of teachers with respect to locality

Table 4.8.4 presents the mean scores and standard deviations of workplace bullying and its dimensions namely person-related bullying, work-related bullying, and physically intimidating bullying, as experienced by teachers teaching in rural and urban secondary schools. The mean scores for person-related bullying, work-related bullying, and physically intimidating bullying were 17.02, 17.32, and 7.3 for teachers teaching in rural secondary schools, and 19.23, 22.73, and 9.28 for teachers teaching in urban secondary schools, respectively.

The SD for person-related bullying, work-related bullying, and physically intimidating bullying was 4.83, 4.34, and 2.1 for teachers teaching in rural secondary schools, and 5.21, 7.4, and 3.48 for teachers teaching in urban secondary schools, respectively.

The t-values calculated for person-related bullying, work-related bullying, and physically intimidating bullying were 4.188, 9.498, and 7.302, respectively. All the t-values were found to be statistically significant at 0.001 level.

Discussion of results

The significant t-values revealed significant differences in workplace bullying dimensions viz., person-related bullying, work-related bullying, physically intimidating bullying for teachers teaching in rural and urban schools. The observation of mean scores of person-related bullying, work-related bullying, and physically intimidating bullying indicated that the mean score of teachers teaching in urban secondary schools was higher as compared to teachers teaching in rural secondary schools. This suggested that teachers teaching in urban secondary schools were more vulnerable to interpersonal mistreatment in the workplace.

Further, this also indicated that teachers teaching in urban secondary schools face greater work-related stress and professional mistreatment than the teachers teaching in rural secondary schools. Along with, this indicated that teachers teaching in urban secondary schools are more likely to encounter physically intimidating behaviours in their workplace.

The findings indicated that locality played a crucial role in terms of forms of workplace bullying, with teachers teaching in urban secondary schools experiencing higher levels of bullying across various dimensions. However, the chi-square test of independence revealed that no association between frequency of workplace bullying and locality, which may be attributed to underreporting of incidents. Such underreporting is often shaped by cultural norms, institutional pressures, or fear of negative consequences, leading teachers to downplay or conceal their actual experiences of bullying. Portelada et al., (2024) showed that although most teachers reported witnessing or experiencing bullying behaviours, only about one-quarter self-identified as victims, indicating substantial underreporting.

Based on these results, Hypothesis 3(b), which states that “there exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to locality,” is accepted to some extent.

The findings aligned with previous research, which suggested that workplace bullying was more prevalent among urban teachers. De Wet and Jacobs (2013) reported

that workplace bullying was widespread among teachers in South Africa, with urban teachers experiencing it more frequently, particularly in work-related and person-related dimensions. The findings confirmed that teachers teaching in urban schools experienced significantly higher levels of workplace bullying compared to their rural counterparts.

Hypothesis 3(c): “There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to teaching experience”.

4.8.5 Results relating to differences in frequency of workplace bullying of teachers with respect to teaching experience

In order to test this hypothesis, and to find out if the frequency in workplace bullying of teachers differ with respect to teaching experience, the respondents were divided into three groups, namely, less than 5 years, 5-10 years, and 10 years and above and a chi-square test of independence was conducted.

Table 4.8.5 Chi-Square Test for Independence between frequency of workplace bullying and teaching experience

Frequency of Workplace Bullying	Teaching experience			
	less than 5 years(N)	5–10 years (N)	10 years and above (N)	Total (N)
Only Rarely	39	38	75	152
Now and Then	5	14	15	34
Total	44	52	90	186

Note. $\chi^2(2, N = 186) = 4.17, p = .125$

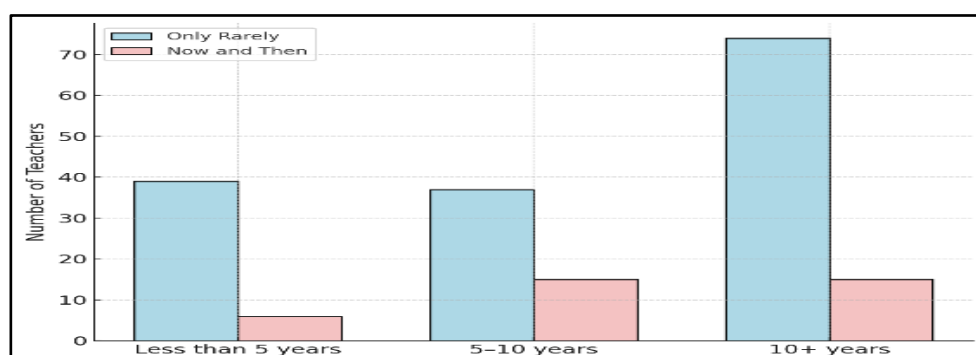


Figure 4.8.5 Frequency of workplace bullying with respect to teaching experience

A chi-square test of independence was conducted to examine the relationship between frequency of workplace bullying and teaching experience. The results, as shown in Table 4.8.5, indicated that the association between the two variables was not significant at 0.05 level, $\chi^2 (2, N = 186) = 4.17, p = .125$ (p value found greater than 0.05, so not significant). All expected cell frequencies were above 5, satisfying the assumption for chi-square analysis.

The observed frequencies showed some variation across experience groups. Teachers with 5–10 years of experience reported the highest proportion of bullying ‘now and then’ (N=14, 26.9%), followed by those with 10 years and above (N=15, 16.7%) and less than 5 years (N=5, 11.4%). For ‘only rarely,’ teachers with less than 5 years (N=39, 88.6%) reported the highest followed by those with 10 years and above (N=75, 83.3%), and 5–10 years (N=38, 73.1%).

Further, the results of the Likelihood Ratio Test ($p = .129$) indicated that the association between years of experience and workplace bullying frequency was not statistically significant, as the p -value exceeded the 0.05 threshold. This test was conducted to validate the findings of the Pearson Chi-Square Test by comparing the likelihood of the observed distribution of data under both the null and alternative hypotheses, thereby ensuring the robustness of the results. Similarly, the Linear-by-Linear Association Test ($p = .802$) showed no significant linear trend across teaching experience categories in relation to workplace bullying frequency. This test was performed to determine whether an ordered pattern or progressive relationship existed between teaching experience and bullying frequency. Since both tests produced p -values greater than .05, it was concluded that there was no significant association or systematic trend between years of teaching experience and the frequency of workplace bullying.

Discussion of Results

These findings indicated that teachers across all three experience groups- “less than 5 years, 5–10 years, and 10 years and above”-did not differ significantly in terms of how often they experienced workplace bullying. Although the observed frequencies showed some variation, with teachers with 5–10 years’ experience, reported bullying “now and then” more often, and teachers with less than 5 years’ experience, more frequently reporting bullying “only rarely,” these differences were not statistically

significant. In other words, the chi-square test, along with the Likelihood Ratio and Linear-by-Linear Association values, confirmed that teaching experience did not play a decisive role in determining the frequency of workplace bullying among teachers. These findings suggested no significant association between frequency of workplace bullying and teaching experience.

4.8.6 Results relating to differences in forms of workplace bullying of teachers with respect to teaching experience

In order to test the hypothesis, and to find out if forms of workplace bullying of teachers differ with respect to teaching experience, the respondents were divided into three groups, namely, less than 5 years, 5-10 years, and 10 years and above and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene's test.

Table 4.8.6.1 Test of homogeneity of variances for different forms of workplace bullying of teachers

Forms of Workplace Bullying	Levene Statistic	df1	df2	Sig.
PR	0.97	2	447	0.38
WR	1.057	2	447	0.348
PI	7.384	2	447	0.001**

*Note: "PR= Person-Related Bullying, WR= Work-related bullying, PI= Physically Intimidating Bullying, ** sign. at 0.01,"*

The above Table 4.8.6.1 reveals the results of Levene's test for various forms of workplace bullying, viz., person-related bullying, work-related bullying, and physically intimidating bullying-to assess variance homogeneity across groups. For person-related bullying and work-related bullying, the p-values (0.38 and 0.348, respectively) were greater than 0.05, indicating homogeneity of variances or equal variances assumed. Therefore, a one-way analysis of variance (ANOVA) could be applied for the analysis of these forms. While p-value (0.001) for physically intimidating bullying was found to be less than 0.05, this indicated that there was no homogeneity of variances for physically intimidating bullying, implying that unequal variances were assumed. Hence, the Welch test should be applied for this dimension.

Table 4.8.6.2 Robust Tests of equality for Physically intimidating bullying

Forms of workplace bullying		L Statistic	df1	df2	Sig.
Physically Intimidating Bullying	Welch	2.367	2	232.016	.096

The above Table 4.8.6.2 shows the value of the Welch Statistic for physically intimidating bullying. The value was found to be 2.367, with a p-value of 0.096. Since the p-value was greater than 0.05, hence it can be concluded that the mean scores for all groups of independent variables are same. This indicated that teachers with (less than 5 years and 5-10 years), (5-10 years and 10 years and above), (less than 5 years and 10 years and above) years of teaching experience did not differ in their experience of physically intimidating bullying.

Table 4.8.6.3 Summary of ANOVA for person-related bullying, work-related bullying forms of workplace bullying

		SS	df	MS	F	Sig.
PR	Between Groups	355.4094	2	177.705	7.242	0.001*
	Within Groups	10968.98	447	24.539		
	Overall	11324.39	449			
WR	Between Groups	355.5448	2	177.772	5.359	0.005*
	Within Groups	14827.04	447	33.170		
	Overall	15182.58	449			

Note: PR- Person-related bullying, WR- Work-related bullying, *sign. at 0.05"

The above Table 4.8.6.3 presents the results of ANOVA for ‘person-related bullying’, and ‘work-related bullying’ across different groups of teaching experience. The F-values (7.242 and 5.359) for ‘person-related bullying’ and ‘work-related bullying’ respectively, were found to be significant ($p = 0.001$ and 0.005 , respectively) at 0.05 level. In the ANOVA table, the p-values being less than 0.05 indicated that the mean scores across different groups of independent variables (teaching experience) were not the same. This indicated that for both ‘person-related bullying’ and ‘work-related bullying’, the mean scores of groups based on teaching experience differed significantly. These results suggested that experiences of bullying in ‘person-related bullying’, and ‘work-related bullying’ significantly varied across different groups. Hence, it may be deduced that one category of independent variable differs significantly

from other categories. Thus, for paired comparison, in Post hoc analysis Turkey method was applied. The table 4.8.6.4 shows multiple comparisons using Turkey method for person-related bullying and work-related bullying.

Table 4.8.6.4 Descriptive statistics for various dimensions of workplace bullying

Forms of Workplace Bullying		N	Mean	SD	SE	p-value
PR	1	112	17.99	4.83	0.45	0.0008*
	2	140	16.28	5.27	0.44	
	2	140	16.28	5.27	0.44	0.0008*
	3	198	18.29	4.78	0.34	
	1	112	17.99	4.83	0.45	0.7181
	3	198	18.29	4.78	0.34	
WR	1	112	19.22	6.58	0.62	0.0684
	2	140	17.42	5.78	0.48	
	2	140	17.42	5.78	0.48	0.0684
	3	198	19.39	5.22	0.37	
	1	112	19.22	6.58	0.62	0.1357
	3	198	19.39	5.22	0.37	

Note: "N= number of participants, M= mean, SD= standard deviation, SE= 1=less than 5 years, 2=5-10 years,3=10 years &above, PR= Person-related bullying, WR= Work-related bullying."

The table 4.8.6.4 shows the descriptive statistics for person-related bullying and work-related bullying, mean, SD, SE, and p values across teaching experience groups- less than 5 years,5-10 years, and 10 years and above.

The p values for teachers with experience of (less than 5 years and 5-10 years),)5-10 years and 10 years and above), and (less than 5 years and 10 years and above) for person-related bullying were found to be 0.0008, 0.0008, and 0.7181 respectively. The p values for teachers with experience of (less than 5 years and 5-10 years), (5-10 years and 10 years and above) were found significant ($p < 0.05$) while for less than 5 years and 10 years and above p value was found to be insignificant. While the p values for work-related bullying for all the groups of teaching experience were found to be insignificant ($p > 0.05$).

The results, as shown in Table 4.8.6.4, indicated a significant difference in person-related bullying across experience groups ($p = 0.0008$). Teachers with 10 years and above experience reported the highest mean score ($M = 18.29$, $SD = 4.78$), followed by those with less than 5 years ($M = 17.99$, $SD = 4.83$), while teachers with 5-10 years had the lowest mean ($M = 16.29$, $SD = 5.28$). However, the comparison between

teachers with less than 5 years and 10 years and above was not significant ($p = 0.7181$), indicating that their experiences of person-related bullying did not differ.

As shown in Table 4.8.6.4, the mean scores of teachers with less than 5 years ($M = 17.99$, $SD = 4.83$), and with 5-10 years ($M = 16.29$, $SD = 5.28$) indicated that teachers with less than 5 years reported greater person-related bullying as compared to teachers with 5-10 years of experience. Further mean scores of teachers with 10 years and above ($M = 18.29$, $SD = 4.78$) and with 5-10 years ($M = 16.29$, $SD = 5.28$) indicated that teachers 10 years and above reported greater person-related bullying as compared to teachers with 5-10 years of experience. However, no significant difference was found between teachers with less than 5 years and 10 years and above.

For work-related bullying, as shown in Table 4.8.6.4, the mean scores of teachers with 10 years and above ($M = 19.39$, $SD = 5.22$) and teachers with less than 5 years ($M = 19.22$, $SD = 6.58$) indicated that both groups reported greater work-related bullying as compared to teachers with 5–10 years of experience ($M = 17.42$, $SD = 5.78$). Further, the mean scores of teachers with 10 years and above ($M = 19.39$, $SD = 5.22$) and teachers with less than 5 years ($M = 19.22$, $SD = 6.58$) suggested no significant difference between these two groups in work-related bullying experiences. This indicated that teachers with less than 5 years and 10 years and above of teaching experience did not differ in their experience related to work-related form of workplace bullying.

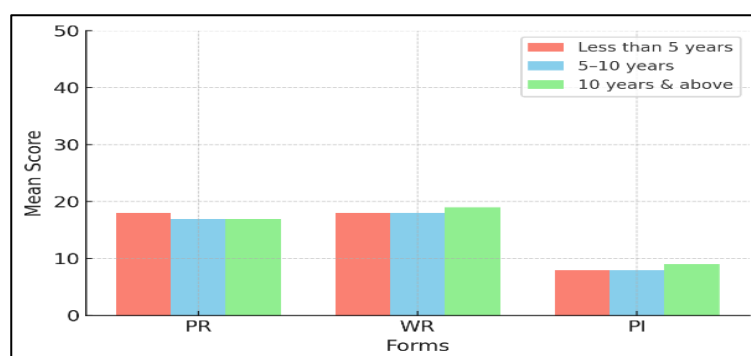


Figure 4.8.6 Mean scores of forms of workplace bullying of teachers with respect to teaching experience

Discussion of results

The insignificant Welch test value for ‘physically intimidating bullying’ indicated that the differences across teaching experience groups were not statistically

significant. This suggested that teachers with less than 5 years, 5–10 years, and 10 years and above of experience did not differ in their experience of physically intimidating bullying involving threats of physical harm, invasion of personal space, or other hostile actions intended to instil fear or exert dominance in the workplace.

The significant F-value for person-related bullying indicated statistically significant differences in experiences of this form of bullying among the three teaching experience groups. Teachers with less than 5 years and those with 10 years and above of experience reported greater experiences of person-related bullying, which includes verbal abuse, social exclusion, and other forms of personal mistreatment. Further teachers with 10 years and above reported greater person-related bullying as compared to their 5–10 years counterparts. However, the difference between teachers with less than 5 years and those with 10 years and above was not significant, indicating that these did not differ in their experience of this form of workplace bullying.

The significant F-value for work-related bullying indicated statistically significant differences in experiences of this form of bullying among the three teaching experience groups. But paired comparisons for the 3 teaching experience groups did not show any difference. This indicated that teachers irrespective of number of years of teaching experience did not differ in experiences with reference to work-related bullying which involves unreasonable job demands, withholding of necessary information, or other actions that undermine a teacher's ability to perform work effectively. However, the chi-square test of independence revealed no significant association between frequency of workplace bullying and teaching experience probably due to underreporting of the same. Such underreporting may occur because teachers hesitate to disclose bullying experiences out of fear of negative consequences, institutional pressure, or cultural norms that discourage openly acknowledging workplace mistreatment.

Based on these findings, Hypothesis 3(c), which states that "there exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to teaching experience," is accepted to some extent. The findings indicated that teaching experience played a crucial role in person-related form of workplace bullying with less than 5 years, and 10 years and above groups experienced higher bullying compared to 5- 10 years group.

The findings aligned with previous research, which suggested that workplace bullying evolves across career stages. Einarsen and Raknes (1997) supported this finding, suggesting that bullying could re-emerge at later career stages due to shifting workplace dynamics. Hogh et al. (2011) countered that bullying generally decreased with tenure, as individuals developed better coping strategies and gained clarity in their roles. Salin and Hoel (2013) found that early-career professionals were particularly vulnerable to workplace bullying due to their lower status and lack of authority. Additionally, Escartin et al. (2011) suggested that mid-career professionals were at higher risk due to competition for promotions and workplace politics.

Hypothesis 3(d): “There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to type of school”.

The hypothesis was examined by using chi square test and independent sample t-test and the results have been shown in Table (4.8.7,4.8.8), on the basis of type of school.

4.8.7 Results relating to differences in frequency of workplace bullying of teachers with respect to type of school

Table 4.8.7 Chi-Square Test for Independence between frequency of workplace bullying and type of school

Frequency of Workplace Bullying	Type of school		
	Government (N)	Private (N)	Total (N)
Only Rarely	72	80	152
Now and Then	9	25	34
Total	81	105	186
Note. $\chi^2(1, N = 186) = 4.94, p = .026$			

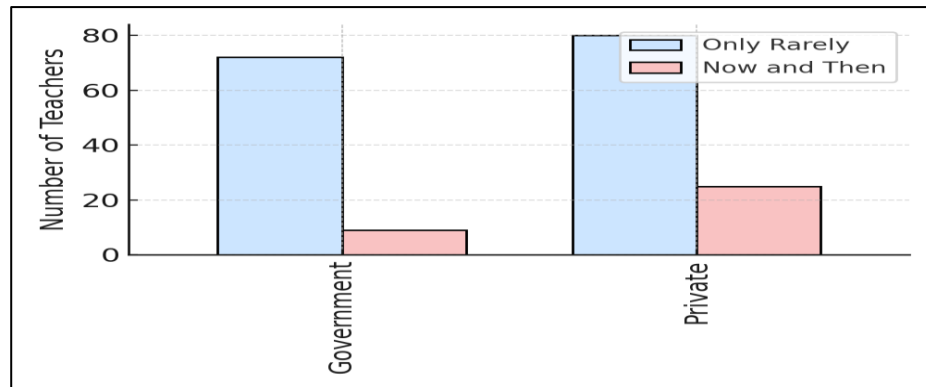


Figure 4.8.7 Frequency of workplace bullying with respect to type of school

A chi-square test of independence was performed to explore the association between the frequency of workplace bullying and type of school among teachers. The results indicated a statistically significant association at the .05 level, $\chi^2 (1, N = 186) = 4.94$, $p = .026$, with a small effect size. All expected cell frequencies were above 5, satisfying the assumption for chi-square analysis. The observed frequencies showed that a higher proportion of teachers teaching in private secondary schools ($N = 25$; 23.8%) reported “Now and Then” bullying compared to teachers teaching in government secondary schools ($N = 9$; 11.1%). Further observed frequencies showed that a higher proportion of teachers teaching in government secondary schools ($N = 72$; 88.9%) reported “Only Rarely” bullying compared to teachers teaching in private secondary schools ($N = 80$; 76.2%). A total of 25 teachers teaching in private secondary schools experienced “Now and Then” bullying, compared to 9 teachers teaching in government secondary schools.

This pattern reflected a school-type-based difference in the frequency of workplace bullying among teachers. The result was supported by the Pearson Chi-Square Test ($\chi^2 = 4.94$, $p = .026$), where the p-value was less than the reference value of 0.05, indicating a statistically significant association between school type and workplace bullying frequency. To ensure the robustness and accuracy of this finding, several supplementary tests were conducted. The Continuity Correction Test ($p = .042$) was applied to adjust the Chi-Square value for the 2×2 contingency table, providing a more precise estimate when marginal totals were uneven. The Likelihood Ratio Test ($p = .023$) compared the likelihood of the observed and expected frequency distributions under both the null and alternative hypotheses, further supporting the significance of

the association. Additionally, the Fisher's Exact Test ($p = .035$) was used to validate the result, offering an exact probability value and confirming the consistency of the findings even with relatively small expected cell frequencies. Since all reported p -values were below .05, these results collectively confirmed that the frequency of workplace bullying was significantly associated with school type.

Discussion of results

These findings suggested a significant association between the frequency of workplace bullying and the type of school, indicating that teachers in private secondary schools were more likely to experience workplace bullying “now and then,” whereas teachers in government secondary schools were more likely to report such experiences “only rarely.”

4.8.8 Results relating to differences in forms of workplace bullying of teachers with respect to type of school

Table 4.8.8 Mean scores of forms of workplace bullying of teachers with respect to type of school

Workplace Bullying forms	School Type	N	M	SD	t-value
PR	GOVT	175	16.89	4.74	2.385*
	PVT	275	18.04	5.15	
WR	GOVT	175	17.41	4.52	3.928**
	PVT	275	19.59	6.37	
PI	GOVT	175	7.27	2.07	3.46**
	PVT	275	8.16	2.95	

Note: N=number of respondents, M=mean, SD= standard deviation, Govt-Government, Pvt-Private, PR= Person-related Bullying, WR= Work-related bullying, PI= Physically Intimidating Bullying, ** sign. at 0.01, *sign. at 0.05.

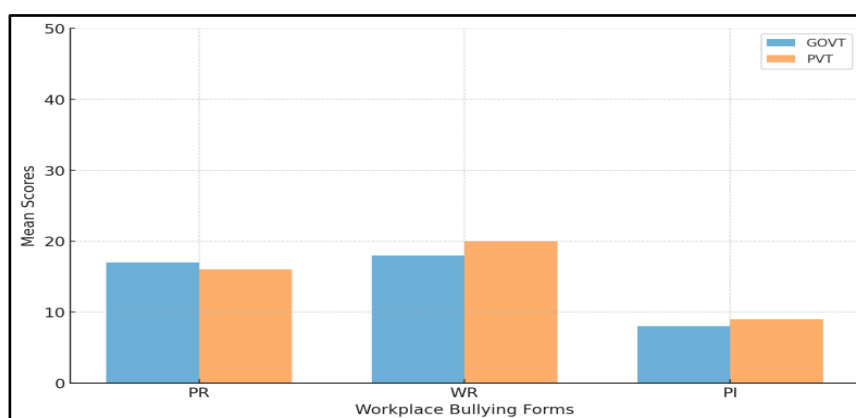


Figure 4.8.8 Mean scores of forms of workplace bullying of teachers with respect to type of school

As presented in Table 4.8.8, for person-related bullying, teachers teaching in government secondary schools reported a mean score of 16.89, while teachers teaching in private secondary schools reported a higher mean score of 18.04. For work-related bullying, the mean score was 17.41 for teachers teaching in government secondary schools, compared to 19.59 for teachers teaching in private schools. In the case of physically intimidating bullying, teachers teaching in government secondary schools reported a mean score of 7.27, whereas teachers teaching in private secondary schools reported a higher mean score of 8.16.

The SD for person-related bullying among teachers teaching in government secondary schools was found to be 4.74, and for teachers teaching in private secondary schools was found to be 5.15. For work-related bullying, the SD was found to be 4.52 for teachers teaching in government secondary schools and 6.37 for teachers teaching in private secondary schools. In the case of physically intimidating bullying, the SD was 2.07 for teachers teaching in government secondary schools and 2.95 for teachers teaching in private secondary schools.

Further, the t-values calculated for different forms of bullying between teachers teaching in government and private secondary schools were found to be 2.38 for ‘person-related bullying’, 3.92 for ‘work-related bullying’, and 3.46 for ‘physically intimidating bullying’. All t-values were found to be significant at the 0.01 level.

Discussion of Results

The significant t-values revealed significant differences in workplace bullying dimensions viz., person-related bullying, work-related bullying, and physically intimidating bullying for teachers teaching in government and private schools. The observation of mean scores of person-related bullying, work-related bullying, and physically intimidating bullying indicated that the mean score of teachers teaching in private secondary schools was higher as compared to teachers teaching in government secondary schools. This suggested that teachers teaching in private secondary schools were more vulnerable to interpersonal mistreatment at workplace. Further, this also indicated that teachers teaching in private secondary schools face greater work-related stress and professional mistreatment than the teachers teaching in government secondary schools. Along with, this indicated that teachers teaching in private

secondary schools were more likely to encounter physically intimidating behaviours in their workplace.

The findings indicated that type of school played a crucial role in workplace bullying, with teachers teaching in private secondary schools experiencing higher levels of bullying with respect to different forms. However, the chi-square test of independence further confirmed this association, and revealed that teachers in private secondary schools reported experiencing workplace bullying “now and then” more frequently, than those in government secondary schools who predominantly reported such experiences “only rarely.”

Based on these findings, Hypothesis 3(d), which states that " There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to type of school," is not accepted.

The findings aligned with previous research, which suggested that teachers teaching in private schools were more vulnerable to workplace bullying. Einarsen and Skogstad (2010) found that workplace bullying was prevalent in both public and private organisations, reinforcing the idea that bullying was a widespread issue. Orunbon and Ibikunle (2023) reported that toxic leadership in private schools significantly contributed to workplace bullying, with teachers reporting feelings of isolation and mistreatment.

However, Scheeler et al., (2022) presented contradictory findings, reporting no significant difference in workplace bullying between teachers in public and private schools, suggesting that bullying behaviours were influenced more by individual leadership practices and organisational culture rather than school type. Despite this, the overwhelming evidence suggested that teachers teaching in private secondary schools experienced significantly higher levels of workplace bullying across all dimensions, including ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying.’

4.9 Comparison of levels of psychological empowerment of teachers with respect to gender, locality, teaching experience and type of school

Hypothesis 4(a): “There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to gender”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.9.1), on the basis of gender.

4.9.1 Results relating to differences in levels of psychological empowerment of teachers with respect to gender

To test the significance of differences in psychological empowerment levels of teachers with respect to gender, the data was segregated into 2 groups-high and low as shown in the following table.

Table:4.9.1 Mean scores of levels of psychological empowerment of teachers with respect to gender

PE Level	Gender	N	Mean	Std. Deviation	t-value
High	Male	66	70.42	3.49	0.95
	Female	36	71.11	3.52	
Low	Male	103	42.58	9.46	1.98*
	Female	125	44.92	8.14	

Note: N=number of respondents, *sign. at 0.05.

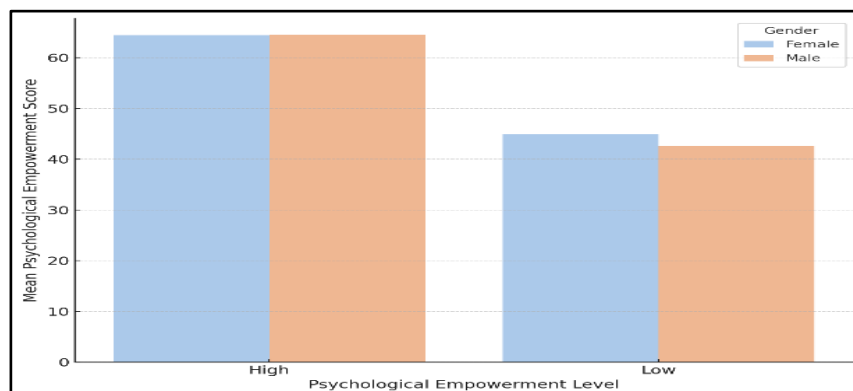


Figure:4.9.1 Mean score of levels of psychological empowerment with respect to gender

As presented in Table 4.9.1, the mean scores of male and female teachers at high psychological empowerment level were found to be 70.42 and 71.11 respectively, while the mean scores of male and female teachers at low psychological empowerment level were found to be 42.58 and 44.92 respectively.

The standard deviation for male and female teachers at high psychological empowerment level was 3.49 and 3.52 respectively. The standard deviation for male and female teachers at low psychological empowerment level was 9.46 and 8.14 respectively.

At high psychological empowerment level, the t-value was found to be 0.95 (insignificant), and at low psychological empowerment level, it was found to be 1.98, significant at the 0.05 level.

Discussion of results

At high level of psychological empowerment, no significant differences existed between male and female teachers. However, significant differences were found at low level of psychological empowerment, female teachers reported higher psychological empowerment level as compared to male teachers.

As a result, it can be inferred that at high-level psychological empowerment, male and female teachers did not differ that is, both groups experienced a comparable sense of ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ in their work, reflecting equal perceptions of autonomy, confidence, and influence in their professional roles.

Further, at the low-level psychological empowerment, female teachers showed greater psychological empowerment as compared to their male counterparts. This indicated that female teachers felt more empowered in terms of meaning, competence, self-determination, and impact, which may be attributed to their stronger inclination toward collaborative practices, greater adaptability in coping with workplace challenges, and higher levels of intrinsic motivation derived from professional and personal commitment to teaching. Thus, the Hypothesis 4(a), which states that “there exists no significant difference in level of psychological empowerment of secondary school teachers with respect to gender,” is not accepted.

The findings aligned with previous research, which suggested that psychological empowerment varies based on gender. Spreitzer (1995) emphasised that

empowerment is shaped by individual perceptions and contextual factors, with women often displaying a stronger intrinsic motivation and sense of meaning in their professional roles. Sageer and Qureshi (2023) also reported that female teachers experienced higher levels of psychological empowerment compared to male teachers.

However, some research suggested that gender differences in psychological empowerment may be context-specific and shaped by workplace culture, leadership practices, and societal norms. Khoury (2024), for instance, found no significant gender differences in psychological empowerment across most dimensions, except for self-determination, where female teachers exhibited slightly higher scores. Despite these perspectives, the current findings indicated that female teachers demonstrated significantly higher levels of psychological empowerment, reinforcing the need for gender-sensitive policies and strategies to enhance empowerment in schools.

Hypothesis 4(b): “There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to locality”.

The hypothesis was examined by using independent sample t-test and the results have been shown in Table (4.9.2), on the basis of locality.

4.9.2 Results relating to differences in levels of psychological empowerment of teachers with respect to locality

To test the significance of differences in the levels of psychological empowerment with respect to locality, the data was divided into 2 groups-high and low as shown in the following table 4.9.2.

Table:4.9.2 Mean scores of psychological empowerment levels of teachers with respect to locality

PE Level	Locality	N	Mean	Std. Deviation	t-value
High	Rural	65	69.80	3.51	3.69**
	Urban	36	72.22	2.93	
Low	Rural	185	44.06	8.82	0.38
	Urban	44	43.45	9.01	

*Note: N=number of respondents: ** sign. at 0.01.*

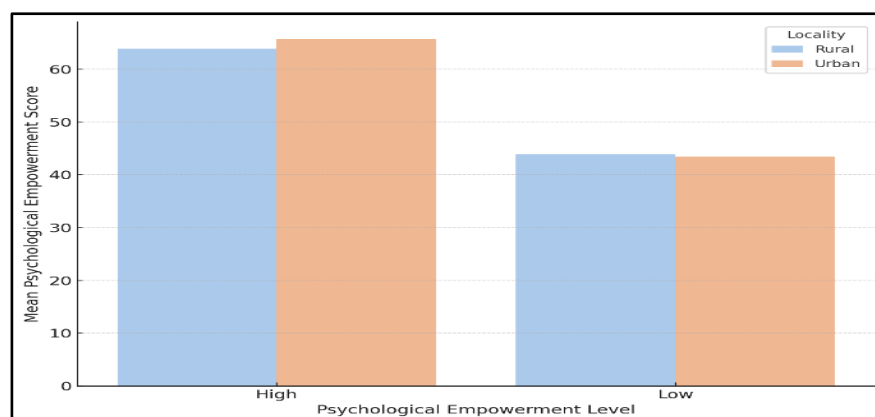


Figure:4.9.2 Mean score of levels of psychological empowerment with respect to locality

As presented in Table 4.9.2, in the high psychological empowerment level, teachers teaching in rural secondary schools reported a mean score of 69.80, while teachers teaching in urban secondary schools reported a mean score of 72.22. In the low psychological empowerment level, the mean score was 44.06 for teachers teaching in rural schools and 43.45 for teachers teaching in urban schools.

The standard deviation for teachers teaching in rural and urban secondary schools in the high psychological empowerment level was found to be 3.51 and 2.93 respectively. The standard deviation for teachers teaching in rural and urban secondary schools in the low psychological empowerment level was found to be 8.82 and 9.01 respectively.

At the high level of psychological empowerment, the t-value was found to be 3.69, significant at the 0.01 level, and at the low psychological empowerment level, it was found to be 0.38 (insignificant).

Discussion of results

The significant t values in the high psychological empowerment level indicated that teachers teaching in rural secondary schools reported significantly lower psychological empowerment compared to teachers teaching in urban secondary schools. As a result, it can be inferred that teachers teaching in urban schools experienced greater psychological empowerment in terms of ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ in their work, reflecting higher perceptions of

autonomy, confidence, and influence in their professional roles compared to their rural counterparts.

Further, at low psychological empowerment level, teachers teaching in rural and urban secondary schools did not differ significantly in psychological empowerment. This indicated that when psychological empowerment was low, teachers from both rural and urban schools experienced similar limitations in autonomy, competence, self-determination, and impact in their professional roles.

Thus, the Hypothesis 4(b), which states that “there exists no significant difference in level of psychological empowerment of secondary school teachers with respect to locality,” is not accepted. In the context of Assam, teachers in urban schools tend to experience stronger psychological empowerment as regular feedback, peer interaction, and participative school practices reinforce their internal sense of competence, self-determination, and impact, whereas in rural schools, relatively routine professional engagement, limited feedback, and fewer opportunities to influence institutional processes may affect their psychological empowerment.

Hypothesis 4(c): “There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to teaching experience”.

The hypothesis was examined by using one-way ANOVA and the results have been shown in Tables (4.9.3.1, 4.9.3.2, 4.9.3.3 4.9.3.4 4.9.3.5, and 4.9.3.6) on the basis of years of experience.

In order to test this hypothesis, and to find out whether teachers at low and high psychological empowerment level differ with respect to teaching experience, the respondents were divided into three groups, namely, (less than 5 years), (5-10 years), and (10 years and above) and One-way ANOVA was employed. Before applying ANOVA, homogeneity of variances must be checked through Levene’s test for both low and high levels individually.

4.9.3 Results relating to differences in levels of psychological empowerment with respect to teaching experience

In order to test this hypothesis, and to find out whether teachers at high psychological empowerment level differ with respect to teaching experience- (less than

5 years), (5-10 years), and (10 years and above) homogeneity of variances was checked through Levene's test.

Table 4.9.3.1 Test of homogeneity of variances for teachers at high psychological empowerment level with respect to teaching experience

	Levene Statistic	df1	df2	Sig.
High Psychological Empowerment	0.554	2	98	0.576

Table 4.7.3.1 presented the results of Levene's test for high psychological empowerment across different categories of teaching experience. The p-value for psychological empowerment was 0.576, which was found to be greater than 0.05. This indicated that the assumption of homogeneity of variances was met, suggesting that the variances across the compared groups were not significantly different. Therefore, equal variances were assumed, and it was appropriate to proceed with a one-way ANOVA to analyse psychological empowerment level across the groups.

Table 4.9.3.2 Summary of ANOVA for teachers at high psychological empowerment level with respect to teaching experience

High Psychological Empowerment					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.869	2	7.934	0.642	0.528
Within Groups	1210.686	98	12.354		
Total	1226.554	100			

The ANOVA results, as shown in Table 4.9.3.2, indicated that there was no statistically significant difference in high psychological empowerment levels across teaching experience groups, $F(2, 98) = 0.642$, $p = 0.528$. Since the p-value was greater than 0.05, this suggested that teachers with different years of teaching experience (less than 5 years, 5–10 years, and 10 years and above) did not differ significantly in their levels of high psychological empowerment. Therefore, post hoc comparisons were not required, as the overall difference was not statistically significant.

Table 4.9.3.3 Descriptive statistics for teachers at high psychological empowerment level with respect to teaching experience

Descriptives					
	Group	N	Mean	SD	SE
High Psychological Empowerment	1	24	71.13	3.651	0.745
	2	33	70.12	3.416	0.595
	3	44	70.82	3.513	0.530

Note: "N=number of respondents, 1=less than 5 years, 2=5-10 years,3=10 years and above, SD= standard deviation
SE=Standard Error

The descriptive statistics, as shown in Table 4.9.3.3, indicated that teachers with less than 5 years of teaching experience reported a mean high psychological empowerment score of 71.13 (SD = 3.65), those with 5–10 years of experience reported a mean score of 70.12 (SD = 3.42), and teachers with 10 years and above reported a mean score of 70.82 (SD = 3.51). Although the mean scores suggested that teachers with fewer years of teaching experience tended to report slightly higher levels of high psychological empowerment compared to those with moderate or longer experience, the overall ANOVA ($p = .528$, $p > .05$). confirmed that these differences were not statistically significant.

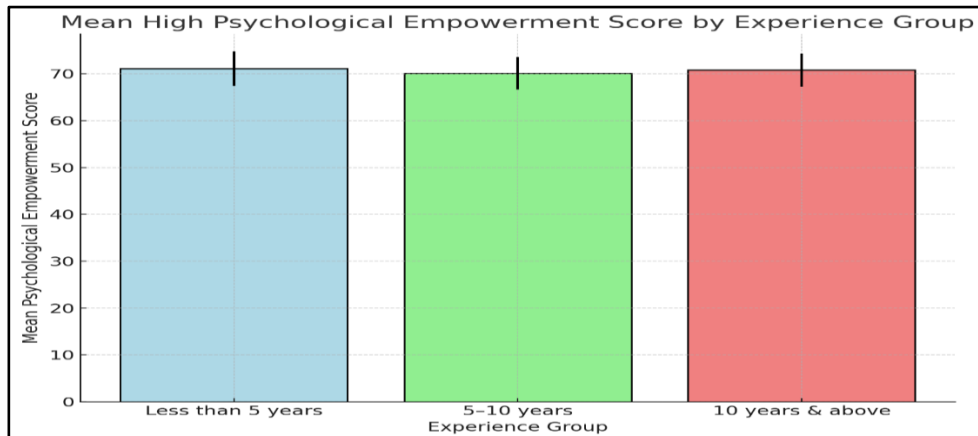


Figure 4.9.3.1 Mean scores of teachers at high psychological empowerment level with respect to teaching experience

Discussion of results

The insignificant F-value from ANOVA revealed statistically no significant differences at high psychological empowerment level across the three experience groups. This finding suggested that, although some numerical differences existed

between groups, teaching experience did not significantly differ at high psychological empowerment level. In other words, high psychological empowerment level did not differ among teachers regardless of their years of teaching experience.

To further examine the same hypothesis, and to find out whether teachers at low psychological empowerment level differ with respect to teaching experience- (less than 5 years), (5-10 years), and (10 years and above) homogeneity of variances was checked through Levene's test.

Table 4.9.3.4 Test of homogeneity of variances for teachers at low psychological empowerment level with respect to teaching experience

	Levene Statistic	df1	df2	Sig.
Low Psychological Empowerment	0.600	2	226	0.550

The table 4.9.3.4 presented the results of Levene's test for low psychological empowerment across different categories of teaching experience. The test produced a Levene Statistic of 0.600 with a p-value of 0.550 which was greater than 0.05. This indicated that the assumption of homogeneity of variances was met, suggesting that the variances across the compared groups were not significantly different. Therefore, equal variances were assumed, and it was appropriate to proceed with a one-way ANOVA to analyse burnout level across the groups.

Table 4.9.3.5 Summary of ANOVA for teachers at low psychological empowerment level with respect to teaching experience

Low Psychological Empowerment					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.556	2	13.278	0.169	0.845
Within Groups	17792.029	226	78.726		
Total	17818.585	228			

The ANOVA results, as shown in Table 4.9.3.5, indicated that there was no statistically significant difference in low psychological empowerment levels across teaching experience groups, $F(2, 98) = 0.169$, $p = .845$. Since the p-value was greater than 0.05, this suggested that teachers with different years of teaching experience (less than 5 years, 5–10 years, and 10 years and above) did not differ significantly in their

levels of low psychological empowerment. Therefore, post hoc comparisons were not required, as the overall difference was not statistically significant.

Table 4.9.3.6 Descriptive statistics for teachers at low psychological empowerment level with respect to teaching experience

Descriptives					
	Group	N	Mean	SD	SE
Low Psychological Empowerment	1	61	44.43	8.525	1.092
	2	72	43.94	9.381	1.106
	3	96	43.58	8.696	0.887

The descriptive statistics, as shown in Table 4.9.3.6, indicated that teachers with less than 5 years of teaching experience reported a mean low psychological empowerment score of 44.43 (SD = 8.53), those with 5–10 years of experience reported a mean score of 43.94 (SD = 9.38), and teachers with 10 years and above reported a mean score of 43.58 (SD = 8.70). Although the mean scores suggested that teachers with fewer years of teaching experience tended to report slightly higher levels of low psychological empowerment compared to their more experienced counterparts, the overall ANOVA confirmed that these differences were not statistically significant ($p = .845$). This indicates that teachers with different years of teaching experience (less than 5 years, 5–10 years, and 10 years and above) did not differ significantly at their levels of low psychological empowerment.



Figure 4.9.3.2 Mean scores of teachers at low psychological empowerment level with respect to teaching experience

Discussion of results

The insignificant F-value for low psychological empowerment revealed that there were no statistically significant differences at the low psychological empowerment level among teachers with different years of experience.

This finding suggested that, although some numerical differences existed between groups, teaching experience did not significantly differ at low psychological empowerment level. In other words, low psychological empowerment did not differ among teachers regardless of their years of teaching experience.

Based on the foregoing discussion, it can be concluded that teaching experience did not significantly influence teachers' high and low psychological empowerment levels. Thus, from the results, it can be concluded that Hypothesis 4(c), which states that "There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to teaching experience," is accepted.

The findings of the present study are in alignment with those of Erturk (2022), who reported no significant differences in psychological empowerment based on teaching experience, suggesting that empowerment perceptions remain relatively stable across career stages due to similar working conditions and organisational structures. However, contrasting evidence from Gardenhour (2008) and Koberg et al. (1999) suggested that experienced teachers tend to exhibit higher levels of psychological empowerment owing to accumulated professional confidence, decision-making autonomy, and influence over institutional practices. Nonetheless, the current findings reaffirm that, in the present sample, teaching experience did not have a statistically significant effect on psychological empowerment, underscoring the individual and perceptual nature of this construct.

Teachers at the high psychological empowerment level reported similar scores across all experience groups, indicating that psychological empowerment was consistent regardless of teaching experience. This finding suggested that factors other than experience—such as leadership style, organisational support, or individual motivation—might have played a more significant role in shaping teachers' sense of "meaning, competence, self-determination, and impact." Likewise, teachers at the low psychological empowerment level showed no significant variation across experience groups, revealing that teaching experience did not markedly alter their lower

perceptions of psychological empowerment. Overall, these results indicated that psychological empowerment was largely an individual and perceptual construct, shaped more by teachers' cognitive appraisal of their roles and work environment than by the number of years they had spent in the teaching profession.

Hypothesis 4(d): “There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to type of school”.

This hypothesis was examined by using independent sample t-test and the results have been shown in Tables (4.9.6 ,4.9.7), on the basis of type of school.

4.9.4 Results relating to differences in levels of psychological empowerment of teachers with respect to type of school

To test the significance of differences in the levels of ‘psychological empowerment’ of teachers teaching in government and private schools, the data was divided into 2 groups-high and low as shown in the following table 4.9.4.

Table 4.9.4 Mean scores of levels of psychological empowerment of teachers with respect to type of school

PE Levels	School Type	N	M	SD	t-value
High	GOVT	45	69.71	3.47	2.50*
	PVT	56	71.43	3.36	
Low	GOVT	90	44.76	8.64	1.15
	PVT	139	43.38	8.95	

Note: N=number of respondents, M=mean, SD= standard deviation, ** sign. at 0.01, *sign. at 0.05.



Figure 4.9.4: Mean scores of levels of psychological empowerment of teachers with respect to type of school

As presented in Table 4.9.4, in the high psychological empowerment level, teachers teaching in government secondary schools reported a mean score of 69.71 and teachers teaching in private secondary schools reported a mean score of 71.43. At the low psychological empowerment level, the mean score was 44.76 for teachers teaching in government secondary schools and 43.38 for teachers teaching in private schools.

The standard deviation for teachers teaching in government secondary schools and teachers teaching in private secondary schools at high psychological empowerment level was found to be 3.47 and 3.36 respectively. The standard deviation for teachers teaching in government secondary schools and teachers teaching in private secondary schools at low psychological empowerment level was found to be 8.64 and 8.95 respectively.

Discussion of results

In the low psychological empowerment level, teachers teaching in government and private secondary schools did not differ significantly in psychological empowerment. However, in the high psychological empowerment level teachers from private secondary schools reported higher levels of psychological empowerment compared to their government school counterparts.

This suggests that while both groups may experience comparable levels of ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ in the low psychological empowerment context, while teachers teaching in private schools may feel more psychologically empowered when empowerment is high. Thus, the Hypothesis 4(d), which states that “there exists no significant difference in level of psychological empowerment of secondary school teachers with respect to type of school,” is accepted to some extent.

The findings indicated that institutional differences may not be evident at lower levels of psychological empowerment but become more pronounced under favourable conditions. The findings aligned with previous research, which suggested that psychological empowerment was shaped more by internal experiences than external factors. Spreitzer (1995) emphasised that psychological empowerment was primarily influenced by individual experiences of autonomy, competence, and impact, rather than external organisational differences. Similarly, Sageer and Qureshi (2023) found no

significant differences in psychological empowerment between teachers teaching in government and private secondary schools in India, reinforcing the argument that school type was not a primary determinant of empowerment levels.

However, some studies presented contrasting perspectives. Arora (2017) reported that teachers teaching in government secondary schools in India perceived higher levels of psychological empowerment in areas such as decision-making, while teachers teaching in private secondary schools reported greater autonomy in instructional methods. In the current context, private schools, with frequent structured performance feedback, tend to enhance teachers' psychological empowerment, compared to their government school counterparts where structured performance feedback is comparatively less frequent.

4.10 CORRELATIONAL ANALYSIS

For measuring the relationship between dependent variable (burnout) and independent variables ('perceived leadership styles,' 'workplace bullying,' and 'psychological empowerment'), Karl Pearson's product-moment correlation was used. The fifth objective of the study was "To find out the relationship of perceived leadership styles of principals (transformational, transactional and laissez-faire) with burnout, workplace bullying and psychological empowerment among secondary school teachers." Keeping in view the objective, the aforementioned technique was applied.

4.10.1 Correlation of perceived leadership styles of principals with burnout among secondary school teachers

In this section, the relationship between 'perceived leadership styles' ('transformational', 'transactional', and 'laissez-faire') and 'burnout' dimensions- 'personal burnout', 'work- related burnout', and 'student-related burnout' among teachers has been analysed. A correlation matrix using Karl Pearson's product-moment correlation method has been prepared to examine how perceived leadership styles of principals correlate with burnout and its dimensions among secondary school teachers. The results have been presented in Table 4.10.1 below.

Table 4.10.1 Summary of correlation of perceived leadership styles of principals and burnout of teachers

Leadership Styles	Burnout			
	PB	WRB	SB	B
TRF	-.219**	-.184**	-.191**	-.202**
TRN	.156**	.175**	.161**	.168**
LF	.149**	.170**	.157**	.162**

Note: "TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership, PB=Personal burnout, WRB=Work-related burnout, SB=Student-related burnout, B=Burnout." **Correlation is significant at 0.01 level (2-tailed).

Table 4.10.1 displays the correlation between perceived leadership styles ('transformational', 'transactional', and 'laissez-faire') and burnout and its dimensions- 'personal burnout', 'work- related burnout', and 'student-related burnout'- among teachers. The values of the coefficient of correlation for transformational leadership style with 'personal burnout', 'work-related burnout', 'student-related burnout', and 'overall burnout' were found to be -0.219**, -0.184**, -0.191**, and -0.202**, respectively. All correlation values were found to be significant at 0.01 level. Examination of the correlation matrix revealed that transformational leadership style was negatively correlated with overall burnout and all its dimensions. The magnitude of the relationship in variables was found to be low but significant and negative. This indicated that teachers who perceived their principals as transformational leaders reported lower burnout.

The coefficient of correlation values for transactional leadership style with 'personal burnout,' 'work-related burnout,' 'student-related burnout,' and 'overall burnout' were 0.156**, 0.175**, 0.161**, and 0.168**, respectively. All correlation values were found to be significant at 0.01 level. The correlation matrix showed that transactional leadership style was positively correlated with overall burnout and all its dimensions. Though the magnitude of the relationship between the variables was low but significant.

Similarly, the coefficient of correlation values for laissez-faire leadership style with personal burnout, work-related burnout, student-related burnout, and overall burnout were 0.149**, 0.170**, 0.157**, and 0.162**, respectively. All correlation

values were found to be significant at 0.01 level. These results indicated a positive correlation of laissez-faire leadership with overall burnout and all its dimensions.

Discussion of results

Thus, it can be deduced that ‘transformational leadership style’ was negatively correlated with personal burnout, work-related burnout, student-related burnout, and overall burnout, confirming that teachers who perceived their principals as exhibiting greater transformational style reported lower burnout. On the other hand, perceived transactional and laissez-faire leadership styles were positively correlated with burnout, indicating that these leadership styles contributed to greater burnout among teachers. The magnitude of the relationship in variables was found to be low, significant, and positive.

These findings imply that leadership styles play a crucial role in shaping teachers' well-being. The negative correlation between ‘transformational leadership style’ and ‘burnout’ suggested that principals who inspire, support, and engage their teachers can help mitigate burnout, fostering a healthier work environment. On the other hand, the positive correlation of ‘transactional and laissez-faire leadership styles’ with burnout indicated that leaders who focus primarily on rewards, control, or exhibit passive leadership may contribute to heightened stress and exhaustion among teachers.

From these results, it was concluded that the hypothesis 5 stating that “There exists no significant relationship between perceived leadership styles (‘transformational’, ‘transactional’, ‘laissez-faire’) and burnout among secondary school teachers” is not accepted.

The findings aligned with previous studies. Eyal and Roth (2011) in Israel found that transactional leadership correlated with higher levels of teacher burnout, which was consistent with the positive correlation observed in this study. Kranioti and Broni (2022) in Greece further demonstrated that while ‘transformational’ and ‘transactional leadership’ styles had a negative impact on burnout, ‘laissez-faire leadership style’ was significantly associated with increased burnout levels among teachers. Norbu and Ghalay, (2023) in Bhutan found that laissez-faire leadership style was associated with increased emotional exhaustion among teachers, reinforcing the current findings that

laissez-faire leadership contributed to higher burnout. Meidelina (2023) in Indonesia found that ‘transformational leadership style’ positively correlated with teacher well-being, suggesting its effectiveness in mitigating burnout. Similarly, Tsang and Teng (2022) in China revealed that transformational leadership style negatively predicted teacher burnout, supporting the present study’s findings.

4.10.2 Correlation of perceived leadership styles of principals with workplace bullying among secondary school teachers

In this section, the relationship between “perceived leadership styles’ of principals-transformational, transactional, and laissez-faire leadership”-and ‘workplace bullying’ has been analysed. A correlation matrix using Karl Pearson's product-moment correlation method was prepared to examine how perceived leadership styles correlate with ‘workplace bullying’ and its dimensions- “person-related bullying, work-related bullying, and physically intimidating bullying” among secondary school teachers. The results have been presented in Table 4.10.2 below.

Table 4.10.2 Summary of correlation between perceived leadership styles of principals and workplace bullying of teachers

Leadership Styles	Workplace Bullying			
	PR	WR	PI	WB
TRF	-.124**	-.141**	-.136**	-.139**
TRN	.104*	.108*	.108*	.110*
LF	.098*	.103*	.103*	.105*

*Note: "TRF-Transformational Leadership, TRN-Transactional Leadership,LF-Laissez-faire leadership, PR- Person-related bullying, WR- Work-related bullying, PI- Physically intimidating bullying, WB-Workplace Bullying." **.* Correlation is significant at 0.01 level (2- tailed). *. Correlation is significant at 0.05 level (2-tailed).

Table 4.10.2 presents the correlation between ‘perceived leadership styles’ (‘transformational,’ ‘transactional,’ and ‘laissez-faire’) and ‘workplace bullying’ and its dimensions, “person-related bullying, work-related bullying, and physically intimidating bullying.” The values of the coefficient of correlation for ‘transformational leadership style’ with ‘person-related bullying,’ ‘work-related bullying,’ ‘physically intimidating bullying,’ and overall ‘workplace bullying’ were found to be -0.124, -0.141, -0.136, and -0.139, respectively. All correlation values were found to be

significant at 0.01 level. Examination of the correlation matrix revealed that transformational leadership style was negatively correlated with workplace bullying and all its dimensions. Though the magnitude of the relationship was low, it was negative and significant, indicating that teachers perceiving their principals as exhibiting transformational leadership style reported lower workplace bullying.

The values of the coefficient of correlation for transactional leadership style with 'person-related bullying,' 'work-related bullying,' 'physically intimidating bullying,' and overall 'workplace bullying' were found to be 0.104, 0.108, 0.108, and 0.110, respectively. All correlation values were found to be significant at 0.05 level. Examination of the correlation matrix revealed that transactional leadership style was positively correlated with workplace bullying and all its dimensions. Though the magnitude of the relationship was low, it was positive and significant, suggesting that higher levels of transactional leadership style were associated with increased experiences of bullying.

Similarly, the values of the coefficient of correlation for laissez-faire leadership style with 'person-related bullying,' 'work-related bullying,' 'physically intimidating bullying,' and overall 'workplace bullying' were found to be 0.098, 0.103, 0.103, and 0.105, respectively. All correlation values were found to be significant at 0.05 level. Examination of the correlation matrix revealed that laissez-faire leadership style was positively correlated with workplace bullying and all its dimensions. Though the magnitude of the relationship was low, it was positive and significant, indicating that teachers perceiving their principals exhibiting laissez-faire leadership style reported higher levels of bullying experiences.

Discussion of Results

Thus, it can be deduced that 'transformational leadership style' was negatively correlated with 'workplace bullying (overall)' and its dimensions. The findings suggested that the greater the adoption of transformational leadership style (characterised by support, vision, and proactive engagement) by principals, the lesser the prevalence of workplace bullying. When school leaders actively motivated and empowered their teachers, a positive and respectful work environment was fostered, reducing incidents of bullying and creating a healthier professional climate.

On the other hand, 'transactional leadership style' was found to be positively correlated with 'workplace bullying,' though the strength of the relationship was weaker. This indicated that a reward-and-punishment-based leadership approach might contribute to workplace stress and interpersonal conflicts, making teachers more vulnerable to bullying experiences.

Moreover, 'laissez-faire leadership style' exhibited a slightly stronger positive correlation with 'workplace bullying,' reinforcing the idea that passive and uninvolved leadership styles create conditions where toxic workplace behaviours thrive. When leadership fails to intervene and address conflicts proactively, bullying incidents-whether person-related, work-related, or physically intimidating-may escalate unchecked, negatively affecting teacher well-being and school climate.

Thus, these results confirmed that leadership styles significantly influenced workplace bullying, leading to the conclusion that hypothesis 6, which states that "There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and workplace bullying," is not accepted.

The findings emphasised the protective role of 'transformational leadership style' in preventing bullying and the detrimental effects of 'laissez-faire leadership style' in enabling toxic workplace dynamics. The results aligned with Cemaloglu (2011), who found a negative relationship between transformational leadership style and workplace bullying, suggesting that transformational leadership style fostered a safer and more inclusive work environment. Similarly, Eyal and Roth (2011) suggested that transactional leadership style was associated with higher teacher burnout, which might create an environment conducive to 'workplace bullying.' Hoel et al. (2010) reported that laissez-faire leadership style was a predictor of workplace bullying, both self-reported and observed. The lack of proactive intervention from leaders created an environment where bullying behaviours went unchecked, increasing the frequency of bullying incidents. McCarley et al., (2016) proposed that transformational leadership style contributed to a safer school climate, resulting in fewer reports of bullying incidents. These findings further reinforced the role of transformational leadership style in reducing workplace bullying. The findings of the present study confirmed the

patterns identified in previous research, emphasising that leadership styles significantly shape workplace bullying experiences in school environments.

4.10.3 Correlation of perceived leadership styles of principals with psychological empowerment among secondary school teachers

In this section, the relationship between ‘perceived leadership styles’ of principals-‘transformational,’ ‘transactional,’ and ‘laissez-faire’-and ‘psychological empowerment’ and its dimensions- ‘meaning, competence, self-determination, and impact’- among secondary school teachers has been analysed. A correlation matrix using Karl Pearson's product-moment correlation method has been prepared to examine how perceived leadership styles correlate with ‘psychological empowerment’ and its dimensions viz., ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ among secondary school teachers. The results have been presented in Table 4.10.3 below.

Table 4.10.3 Summary of correlation in perceived leadership styles of principals and psychological empowerment of teachers

Leadership Styles	Psychological Empowerment				
	M	C	SD	I	PE
TRF	.247**	.242**	.246**	.245**	.245**
TRN	-.111*	-.108*	-.112*	-.106*	-.110*
LF	-.095*	-.097*	-.098*	-.094*	-.096*

Note: “TRF=Transformational Leadership, TRN=Transactional Leadership, LF=Laissez-faire leadership, M=Meaning, C=Competence, SD=Self-Determination, I=Impact, PE=Psychological Empowerment.” ** Correlation is significant at the 0.01 level, (2- tailed), *. Correlation is significant at the 0.05 level (2-tailed).

Table 4.10.3 presents the correlation between perceived leadership styles (‘transformational,’ ‘transactional,’ and ‘laissez-faire’) and ‘psychological empowerment’ and its dimensions viz., ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and overall ‘psychological empowerment.’

The correlation values for transformational leadership with ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and ‘psychological empowerment’ (overall) were 0.247, 0.242, 0.246, 0.245, and 0.245, respectively. The values were positive and significant at the 0.01 level. Though the magnitude of the relationship was found to be low, but positive and significant indicating that higher perception of transformational leadership style was associated with higher psychological empowerment.

The values of the coefficient of correlation for transactional leadership style with ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and ‘psychological empowerment (overall)’ were -0.111, -0.108, -0.112, -0.106, and -0.110, respectively. Though the magnitude of the relationship between variables was low, it was negative and significant at the 0.05 level. Examination of the correlation matrix revealed that ‘transactional leadership style’ was negatively correlated with ‘psychological empowerment’ and its dimensions, indicating that a higher perception of transactional leadership style was associated with lower psychological empowerment.

Similarly, the values of the coefficient of correlation for laissez-faire leadership style with ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and ‘psychological empowerment(overall)’ were -0.095, -0.097, -0.098, -0.094, and -0.096, respectively. Though the magnitude of the relationship between variables was low, it was negative and significant at the 0.05 level. Examination of the correlation matrix indicated that laissez-faire leadership style was negatively correlated with psychological empowerment. This suggested that teachers who perceived their principals as exhibiting laissez-faire leadership style experienced lower psychological empowerment.

Discussion of results

The results indicated that ‘transformational leadership style’ was positively correlated with ‘psychological empowerment’ and all its dimensions. This suggested that teachers who perceived their principals as exhibiting ‘transformational leadership style’ had greater ‘meaning’ in their work, higher ‘competence,’ enhanced ‘self-determination,’ and greater perceived ‘impact.’ Transformational leadership style appeared to foster a school environment where teachers felt more empowered, motivated, and capable of making meaningful contributions.

On the other hand, ‘transactional leadership style’ showed weak but significant negative correlations with ‘psychological empowerment.’ This implied that a structured, reward-based leadership approach did not necessarily enhance a sense of empowerment among teachers. The findings suggested that transactional

leadership style, while providing structure, might not actively promote teachers' autonomy, competence, or overall empowerment.

Laissez-faire leadership style exhibited the strongest negative correlations with psychological empowerment. This indicated that passive leadership was detrimental to teachers' competence, self-determination, and overall empowerment. The lack of involvement from leaders created an environment where teachers felt less capable, autonomous, and influential in their professional roles.

Based on these findings, hypothesis 7, which states that “There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- fair) of principals and psychological empowerment “is not accepted.

The findings aligned with Ganjali (2016) in Iran, who reported a significant positive relationship between ‘transformational leadership’ and ‘psychological empowerment.’ Mufti et al. (2019) in Pakistan found no significant relationship between ‘transactional leadership’ and ‘psychological empowerment,’ suggesting that transactional leadership might not actively contribute to psychological empowerment. Allameh et al. (2012) in Iran reported strong positive correlation between transformational leadership and psychological empowerment, emphasising its critical role in enhancing teachers' sense of meaning, competence, and autonomy. The present study confirmed these patterns, reinforcing the crucial role of ‘transformational leadership style’ in empowering teachers while highlighting the limitations of ‘transactional and laissez-faire leadership styles.’

4.10.4 Correlation of psychological empowerment with workplace bullying among secondary school teachers

In this section, the relationship between ‘psychological empowerment’ and its dimensions-“meaning, competence, self-determination, impact” and ‘workplace bullying’ and its dimensions-“person-related bullying, work-related bullying, and physically intimidating bullying” was analysed. A correlation matrix has been prepared, and the results have been presented in Table 4.10.4.

Table 4.10.4 Summary of correlation in psychological empowerment and workplace bullying of teachers

Psychological Empowerment	Workplace Bullying			
	PR	WR	PI	WB
M	-.155**	-.094*	-.137**	-.130**
C	-.151**	-0.088	-.132**	-.125**
SD	-.151**	-0.089	-.134**	-.126**
I	-.150**	-0.089	-.133**	-.125**
PE	-.152**	-0.090	-.134**	-.127**

*Note: "PR=Person-related bullying, WR= Work-related bullying, PI= Physically intimidating bullying, WB=Workplace bullying, M= Meaning, C= Competence, SD= Self-Determination, I=Impact, PE=Psychological Empowerment." **.* Correlation is significant at the 0.01 level (2-tailed), *. Correlation is significant at the 0.05 level (2-tailed).

Table 4.10.4 presents the correlation between ‘psychological empowerment’ and its dimensions- ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and ‘workplace bullying’ and its dimensions, ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying.’

The values of the coefficient of correlation for ‘meaning’ with ‘person-related bullying,’ ‘work-related bullying,’ ‘physically intimidating bullying,’ and ‘workplace bullying’ were -0.155, -0.094, -0.137, and -0.130, respectively. Examination of the correlation matrix revealed that ‘meaning’ was negatively correlated with ‘workplace bullying’ and its dimensions. The correlations of ‘meaning’ with ‘person-related bullying’ and ‘physically intimidating bullying’ were significant at 0.01 level while for work-related bullying, it was significant at 0.05 level.

The values of the coefficient of correlation for ‘competence’ with ‘person-related bullying,’ ‘work-related bullying,’ ‘physically intimidating bullying,’ and ‘workplace bullying’ were -0.151, -0.089, -0.132, and -0.125, respectively. Examination of the correlation matrix revealed that ‘competence’ was negatively correlated with ‘workplace bullying’ and its dimensions, suggesting that teachers who felt more competent in their roles reported lower experiences of bullying. The correlations of ‘competence’ with ‘person-related bullying’ and ‘physically intimidating bullying’ were significant at 0.01 level, while with respect to ‘work-related bullying,’ it was not significant.

Similarly, the values of the coefficient of correlation for ‘self-determination’ with ‘person-related bullying,’ ‘work-related bullying,’ ‘physically intimidating

bullying,' and 'workplace bullying' were -0.151, -0.089, -0.134, and -0.126, respectively. Examination of the correlation matrix indicated that 'self-determination' was negatively correlated with 'workplace bullying' and all its dimensions, meaning that teachers who experienced higher self-determination and autonomy in their roles were less likely to report 'workplace bullying' incidents. The correlations with 'person-related bullying' and 'physically intimidating bullying' were significant at 0.01 level, while with respect to 'work-related bullying,' it was not significant.

For impact, the values of the coefficient of correlation with 'person-related bullying,' 'work-related bullying,' 'physically intimidating bullying,' and 'workplace bullying' were -0.150, -0.089, -0.133, and -0.125, respectively. Examination of the correlation matrix suggested that 'impact' was negatively correlated with 'workplace bullying' and all its dimensions, indicating that teachers who perceived themselves as having a strong impact in their schools reported lower experiences of 'workplace bullying.' The correlations of impact with 'person-related bullying' and 'physically intimidating bullying' were significant at 0.01 level, while with respect to 'work-related bullying,' it was not significant.

The values of the coefficient of correlation for overall 'psychological empowerment' with 'person-related bullying,' 'work-related bullying,' 'physically intimidating bullying,' and 'workplace bullying' were -0.152, -0.090, -0.134, and -0.127, respectively. Examination of the correlation matrix revealed that psychological empowerment was negatively correlated with workplace bullying and all its dimensions, suggesting that teachers with a higher sense of psychological empowerment were less likely to experience workplace bullying. The correlations of psychological empowerment (overall) with person-related bullying and physically intimidating bullying were significant at 0.01 level, while with respect to work-related bullying, it was not significant.

Discussion of results

The results highlighted a significant negative relationship between 'psychological empowerment' and 'workplace bullying,' suggesting that teachers with higher levels of empowerment experienced less bullying across different dimensions. Psychological empowerment appeared to act as a protective factor, reducing teachers' susceptibility to various forms of mistreatment.

Among the dimensions of workplace bullying, person-related bullying exhibited the strongest negative correlation with psychological empowerment. This indicated that when teachers had a strong sense of ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ in their roles, they were less likely to be subjected to interpersonal mistreatment. Work-related bullying showed a negative correlation with meaning, suggesting that greater meaning in work reduced the likelihood of teachers experiencing job-related stressors and coercive behaviours. Further, physically intimidating bullying also showed negative correlation with psychological empowerment and all its dimensions, indicating that teachers who felt psychologically empowered were less likely to experience or tolerate acts of physical intimidation, threats, or hostile behaviours in the workplace. A strong sense of empowerment likely enhanced their confidence, assertiveness, and ability to set boundaries, thereby reducing vulnerability to such aggressive conduct. Moreover, work-related bullying showed no significant association with competence, self-determination, impact, and overall psychological empowerment dimensions.

Additionally, the overall measure of ‘workplace bullying’ also demonstrated a significant negative correlation with ‘psychological empowerment’ and all its dimensions. This indicated that teachers who experienced greater ‘meaning,’ ‘competence,’ ‘self-determination,’ and ‘impact’ in their work faced lower overall levels of workplace bullying. The inverse relationship suggests that psychological empowerment functions as a general protective factor against hostile work environments, fostering teachers’ confidence, autonomy, and perceived control, which may deter bullying behaviours and promote mutual respect within the school setting.

Based on these findings, the hypothesis 8 which states that “There exists no significant relationship between psychological empowerment and workplace bullying among secondary school teachers “is not accepted.

The results confirmed that ‘psychological empowerment’ played a crucial role in lowering the prevalence of ‘workplace bullying’ among teachers. The significant negative correlations between all dimensions of ‘psychological empowerment’ and ‘workplace bullying’ indicated that fostering a supportive and empowering school environment could mitigate bullying experiences among teachers.

The findings aligned with Hampton et al. (2019) in the United States, who reported that psychological empowerment was negatively correlated with workplace bullying. This emphasised that individuals who felt a greater sense of autonomy and competence in their roles were less likely to be targets of bullying. Similarly, Marcello (2010) in the United States found that psychological empowerment was inversely related to workplace bullying, reinforcing the notion that when teachers felt empowered, they were better equipped to handle workplace conflicts and were less susceptible to mistreatment by colleagues, administrators, or students. The present study confirmed these patterns, highlighting that enhancing psychological empowerment among teachers could serve as an effective strategy to reduce workplace bullying and create a more positive school environment.

4.10.5 Correlation of workplace bullying with burnout among secondary school teachers

In this section, the relationship between ‘workplace bullying’ and its dimensions- ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying,’ and burnout and its dimensions- ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ among secondary school teachers was analysed. Correlation matrix was prepared and the results have been presented in Table 4.10.5 below.

Table 4.10.5 Correlation of workplace bullying with burnout among secondary school teachers

Workplace Bullying	Burnout			
	PB	WRB	SB	B
PR	.873**	.803**	.823**	.851**
WR	.819**	.758**	.765**	.797**
PI	.855**	.813**	.828**	.850**
WB	.878**	.815**	.829**	.859**

*Note: “PB- Personal burnout, WRB- Work-related burnout, SB- Student-related burnout, B-Burnout, PR- Person-related bullying, WR- Work-related bullying, PI- Physically intimidating bullying, WB-Workplace bullying.”-**. Correlation is significant at 0.01 level (2-tailed).*

Table 4.10.5 presents the correlation between ‘burnout’ and its dimensions-- ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ and ‘workplace bullying’ and its dimensions, including ‘person-related bullying,’ ‘work-related bullying,’ and ‘physically intimidating bullying.’

The values of the coefficient of correlation for person-related bullying with ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ and overall ‘burnout’ were 0.873, 0.803, 0.823, and 0.851, respectively. The magnitude of the relationship between ‘person-related bullying’ and dimensions of ‘burnout’ was found to be very high and significant. This implies that teachers facing verbal abuse and social exclusion experienced greater emotional exhaustion, work stress, and student-related strain.

The values of the coefficient of correlation for work-related bullying with ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ and overall ‘burnout’ were 0.819, 0.758, 0.765, and 0.797, respectively. The magnitude of the relationship between work-related bullying and burnout dimensions was found to be high and significant. This implies that teachers facing excessive workload pressures, unfair treatment, or professional obstruction experienced greater emotional exhaustion, work stress, and student-related strain.

Similarly, the values of the coefficient of correlation for physically intimidating bullying with ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ and overall ‘burnout’ were 0.855, 0.813, 0.828, and 0.850, respectively. The relationship between physically intimidating bullying and burnout dimensions was found to be strong and significant. This implies that teachers subjected to threats or physical intimidation reported higher levels of emotional exhaustion and workplace stress. The strong correlation underscores the severe impact of physically intimidating bullying on teacher burnout, highlighting the need for strict policies to prevent such behaviours and ensure a safe work environment.

The values of the coefficient of correlation for overall workplace bullying with ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout,’ and overall ‘burnout’ were 0.878, 0.815, 0.829, and 0.859, respectively. The magnitude of the relationship between ‘workplace bullying’ and ‘burnout’ dimensions was found to be very high and significant. This implies that teachers experiencing workplace bullying were at the highest risk of burnout, reinforcing the strong link between workplace mistreatment and emotional exhaustion.

Discussion of results

The results highlighted a strong positive relationship between ‘overall workplace bullying’ and ‘burnout (overall),’ suggesting that teachers experiencing greater workplace bullying reported higher burnout levels. Workplace bullying appeared to play a critical role in the development of burnout among teachers, increasing emotional exhaustion and reducing job satisfaction. Additionally, the strong correlations between person-related bullying, work-related bullying, and physically intimidating bullying with burnout dimensions indicated that different forms of workplace bullying contributed to teachers' emotional and psychological strain.

Based on these findings, the hypothesis 9 which states that “There exists no significant relationship between workplace bullying and burnout among secondary school teachers ” is not accepted.

The results confirmed that ‘workplace bullying’ significantly contributed to burnout among teachers, reinforcing the need for interventions aimed at reducing bullying and supporting teacher well-being. The significant positive correlations between all bullying dimensions and burnout emphasised the importance of proactive measures by educational institutions to address ‘workplace bullying’ and mitigate its negative impact on teachers.

The findings aligned with Bernotaite and Malinauskiene, (2017) in Lithuania, who found that sometimes and severe bullying were associated with emotional exhaustion, depersonalisation, and reduced personal accomplishment among teachers. Similarly, Okcu and Cetin (2017) in Turkey reported a significant positive relationship between teachers’ exposure to ‘workplace bullying’ and their ‘burnout’ levels. Their findings indicated that as teachers' experiences of bullying increased, so did their burnout levels.

4.11 MEDIATION ANALYSIS

The eighth objective of the study was to “To investigate the mediating role of workplace bullying on the relationship between perceived leadership styles of principals (‘transformational,’ ‘transactional’ and ‘laissez-faire’) and burnout.” In order to realise this objective, SPSS software for Windows was utilised for the statistical analysis. The mediation model was assessed using Model 4 from Dr. Andrew F. Hayes' PROCESS macro v 4.0 for SPSS (Hayes, 2017). Additionally, Hayes recommended

using 5,000 bootstrap bias-corrected 95% confidence intervals (BC CI) to assess the indirect effect, rather than relying on the ratio of the indirect effect to the overall or direct effect. Bootstrap is a method used to understand how accurate or stable a result is by taking many samples from the data.

4.11.1 Mediating role of workplace bullying in the relationship between perceived leadership styles of principals (transformational, transactional, and laissez-faire) and burnout.

To investigate the mediating role of the ‘workplace bullying’ on the relationship between ‘perceived leadership styles’ of principals-“transformational, transactional and laissez-faire” and ‘burnout,’ mediation analysis was carried out. First, Karl Pearson’s product-moment correlation was used to assess the direct relationship between perceived leadership styles and burnout. Then workplace bullying was introduced as a mediator to evaluate its influence on this relationship.

Mediation analysis is performed to investigate the following components:

- i. Indirect Effect ($a*b$): The effect of the independent variable (IV) on the dependent variable (DV) that occurs through the mediating variable (MV).
- ii. Total Effect (c): The overall effect of the independent variable on the dependent variable without accounting for the mediator.
- iii. Direct Effect (c'): The effect of the independent variable on the dependent variable while controlling for the influence of the mediating variable.

Mediation can be categorised as either full or partial. Full mediation occurs when the independent variable (IV) influences the dependent variable (DV) entirely through the mediating variable (MV), with no direct effect remaining. In contrast, partial mediation is present when the independent variable exerts part of its influence through the mediator while also maintaining a direct effect on the dependent variable. In cases of partial mediation, both the indirect path ($a*b$) and the direct path (c') are statistically significant, indicating that the IV impacts the DV both directly and indirectly through the MV.

4.11.1.1 Results relating to mediating role of workplace bullying in the relationship between transformational leadership style of principals and burnout of secondary school teachers

The description of model along with the different variables where Y (burnout) was dependent variable, X (transformational leadership style) was independent variable, and (M) workplace bullying was the mediating variable. The sample size was 450.

Table 4.11.1 Mediation analysis of workplace bullying on the relationship between transformational leadership style and burnout of secondary school teachers
Mediation Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower	Upper	% Mediation
Indirect (a*b)	-0.1175	-0.5944	0.1899	-0.9479	-0.2142	58.2
Direct (c')	-0.0845	-0.4274	0.1222	-0.6677	-0.1872	41.8
Total (c)	-0.202	-1.0218	0.2341	-1.4819	-0.5617	100

Path Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower 95% CI	Upper 95% CI
TRF $\rightarrow$ WB	-0.1387	-0.5431	0.1832	-0.903	-0.1831
WB $\rightarrow$ B	0.8469	1.0945	0.0312	1.0331	1.1559
TRF $\rightarrow$ B	-0.202	-1.0218	0.2341	-1.4819	-0.5617

Note: TRF=Transformational leadership, B=Burnout, WB=Workplace Bullying

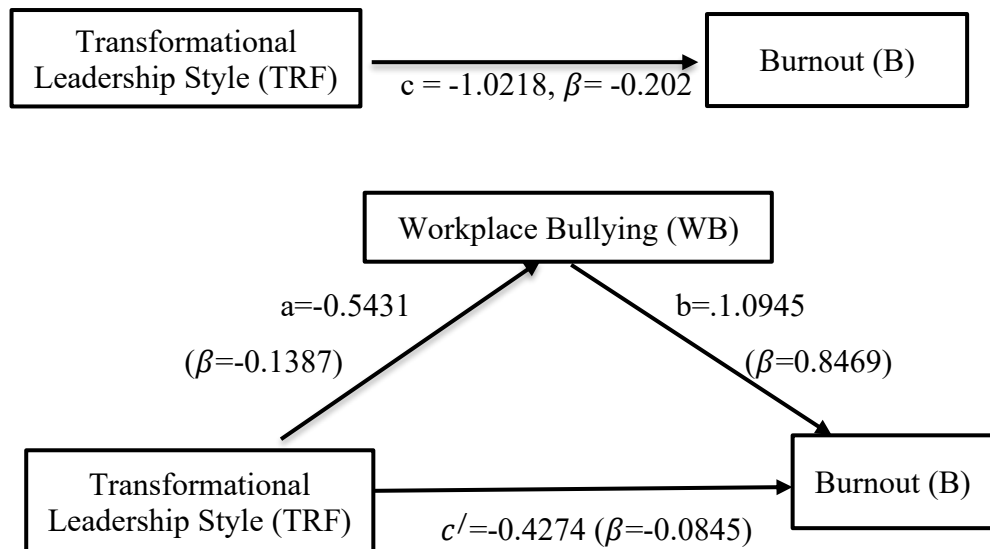


Figure 4.11.1: Workplace bullying in the relationship between transformational leadership style and burnout

Figure 4.11.1 shows the mediation model of ‘workplace bullying’ on the relationship between ‘transformational leadership style’ of principals and ‘burnout’ of secondary school teachers.

A mediation analysis was conducted to examine the mediating effect of ‘workplace bullying’ on the relationship between ‘transformational leadership style’ and ‘burnout’ among secondary school teachers. Table 4.11.1 shows mediation estimates for the total effect of workplace bullying on the relationship between ‘transformational leadership style’ and ‘burnout.’

The total effect of the model was found to be significant, $c = -1.0218$, 95% CI $[-1.4819, -0.5617]$, $p < .001$. It was found that there was a statistically significant direct effect, $c' = -0.4274$, 95% CI $[-0.6677, -0.1872]$, $p = .0005$. A statistically significant indirect effect was also found, $a \times b = -0.5944$, 95% CI $[-0.9479, -0.2142]$. These results suggested that workplace bullying partially mediated the relationship between transformational leadership style and burnout.

In summary, these results suggested that workplace bullying partially mediated the relationship between transformational leadership style and burnout, with an indirect effect that appears to be significant. This type of mediation is present when the predictor variable (transformational leadership style) exerts part of its influence via the mediator (workplace bullying), and part of its influence directly on the outcome variable (burnout). Thus, the influence was exerted on burnout both through transformational leadership style alone and through its effect on reducing workplace bullying. Since both path $a \times b$ (indirect effect) and path c' (direct effect) were significant, the results indicated that transformational leadership style influenced burnout via the mediatory role of workplace bullying.

The direct effect accounted for approximately 41.8% of the total effect, while the indirect effect through workplace bullying contributed to approximately 58.2% ($-0.5944 / -1.0218$). This indicated that although transformational leadership style independently reduced burnout, a larger portion of its influence was mediated by its role in reducing workplace bullying.

Discussion of results

The results indicated that ‘transformational leadership style’ reduced ‘burnout’ not only by directly lowering it but also by decreasing ‘workplace bullying,’ which in

turn further reduced ‘burnout’ levels. Since both the direct effect (the influence of ‘transformational leadership style’ on ‘burnout’ while controlling for workplace bullying) and the indirect effect (the influence of transformational leadership style on burnout through workplace bullying) were significant, it confirmed that workplace bullying played a crucial but not exclusive role in mediating the relationship.

The results are consistent with prior findings. For instance, Okcu and Cetin (2017) in Turkey observed that exposure to bullying increased teachers' burnout levels significantly. These findings highlighted the importance of addressing workplace bullying, which includes persistent mistreatment such as verbal abuse, exclusion, and intimidation, to reduce burnout in teachers. The findings emphasised the critical role of reducing workplace bullying in schools to mitigate teacher burnout.

4.11.1.2. Results relating to mediating role of workplace bullying in the relationship between transactional leadership style of principals and burnout of secondary school teachers

The description of model along with the different variables where Y [burnout] was dependent variable, X (transactional leadership style) was independent variable, and M (workplace bullying) was the mediating variable. The sample size was 450.

Table 4.11.2 Mediation analysis of workplace bullying on the relationship between transactional leadership style and burnout of secondary school teachers
Mediation Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower 95% CI	Upper 95% CI	% Mediation
Indirect (a*b)	0.0938	0.562	0.2443	0.902	1.0427	55.9
Direct (c'/)	0.0739	0.443	0.1447	0.7274	0.1585	44.1
Total(c)	0.1677	1.005	0.2792	-0.4563	1.5536	100.0

Path Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower 95% CI	Upper 95% CI
TRN $\rightarrow$ WB	0.1102	0.5113	0.2178	0.0833	0.9393
WB $\rightarrow$ B	0.8504	1.0991	0.0312	1.0378	1.1604
TRN $\rightarrow$ B	0.1677	1.005	0.2792	0.4563	1.5536

Note: TRN=Transactional leadership, B-Burnout, WB-Workplace Bullying

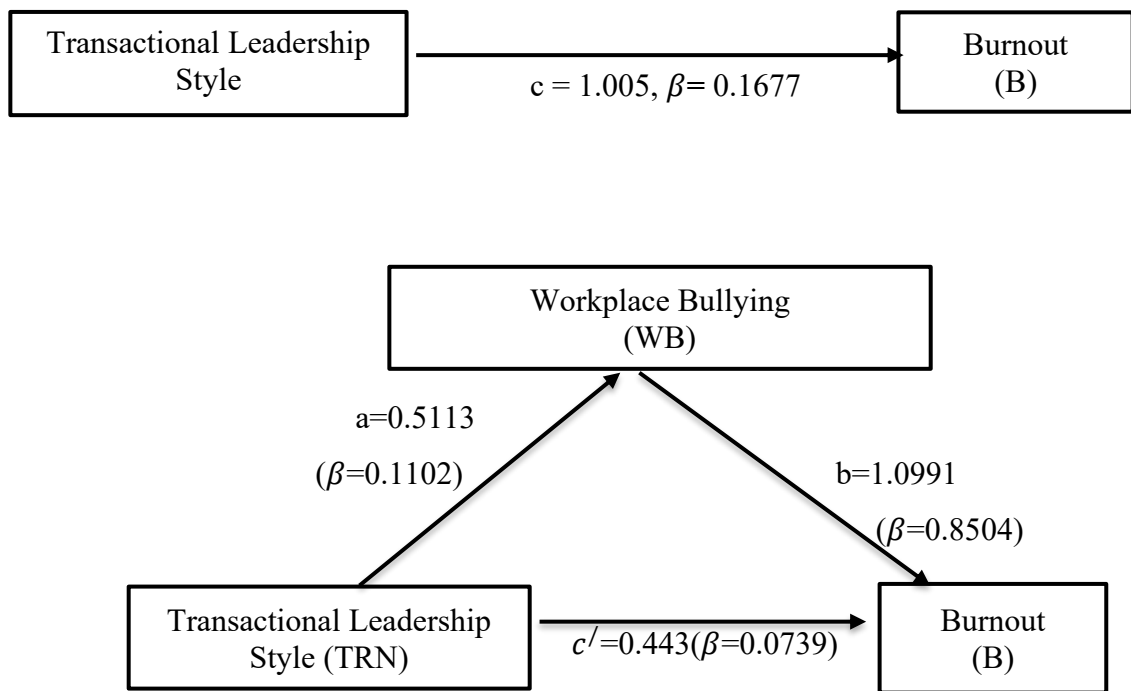


Figure 4.11.2: Workplace bullying in the relationship between transactional leadership style and burnout

Figure 4.11.2 shows the mediation model of ‘workplace bullying’ in the relationship between ‘transactional leadership style’ of principals and ‘burnout.’

A mediation analysis was conducted to examine the mediating effect of workplace bullying on the relationship between transactional leadership style and burnout among secondary school teachers. Table 4.11.2 shows mediation estimates for the total effect of workplace bullying on the relationship between transactional leadership style and burnout.

The total effect of the model was found to be significant, $c = 1.005$, 95% CI [0.4563, 1.5536], $p < .001$. It was found that there was a statistically significant direct effect, $c' = 0.443$, 95% CI [0.1585, 0.7274], $p = .0023$. A statistically significant indirect

effect was also found, $a \times b = 0.562$, 95% CI [0.0902, 1.0427]. These results suggested that workplace bullying partially mediated the relationship between transactional leadership and burnout.

In summary, these results suggested that workplace bullying partially mediated the relationship between transactional leadership style and burnout, with a significant indirect effect. This type of mediation occurs when the predictor variable (transactional leadership style) exerts some of its influence via the mediator (workplace bullying), while also exerting some direct influence on the outcome variable (burnout). Thus, both the indirect effect ($a \times b$) and the direct effect (c') were statistically significant, indicating that transactional leadership style influences burnout both directly and through its impact on workplace bullying.

The direct effect accounted for approximately 44.1% of the total effect, while the indirect effect through workplace bullying contributed to approximately 55.9% ($0.562 / 1.005$). This indicated that although majority of the effect of transactional leadership style on burnout was direct, a substantial and statistically significant portion was mediated by its effect on increasing workplace bullying, which in turn contributed to higher burnout levels among teachers.

Discussion of results

The results suggested that workplace bullying partially mediated the relationship between transactional leadership style and burnout, with a significant indirect effect. This meant that transactional leadership increased burnout not only directly but also indirectly through increase of workplace bullying, which in turn contributed to higher burnout levels. Since both the direct effect (the influence of transactional leadership style on burnout while controlling for workplace bullying) and the indirect effect (the influence of transactional leadership style on burnout through workplace bullying) were significant, it confirmed that workplace bullying played a crucial but not exclusive role in mediating the relationship.

The findings aligned with Okcu and Cetin (2017) in Turkey, indicating that exposure to workplace bullying significantly increased teachers' burnout levels. Similarly, Dehue, et al., (2012) in the Netherlands found that workplace bullying was strongly associated with burnout among employees, emphasising the mediating role of bullying behaviours in organisational settings.\

4.11.1.3. Results relating to mediating role of workplace bullying in the relationship between laissez-faire leadership style of principals and burnout of secondary school teachers

The description of model along with the different variables where Y [burnout] was dependent variable, X (laissez-faire leadership style) was independent variable, and M (workplace bullying) was the mediating variable. The sample size was 450.

Table 4.11.3 Mediation analysis of workplace bullying on the relationship between laissez-faire leadership style and burnout of secondary school teachers

Mediation Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower 95% CI	Upper 95% CI	% Mediation
Indirect (a*b)	0.0892	0.5007	0.2351	0.0479	0.9741	55
Direct (c'/)	0.0731	0.4104	0.1356	0.144	0.6768	45
Total(c)	0.1622	0.9111	0.2618	0.3965	1.4256	100.0

Path Estimates

Effect	Standardized Coefficient (β)	Estimates [Unstandardized Coefficient (b)]	SE	Lower 95% CI	Upper 95% CI
LF → WB	0.1048	0.4553	0.2042	0.054	0.8565
WB → B	0.8509	1.0997	0.0312	1.0384	1.1611
LF → B	0.1622	0.9111	0.2618	0.3965	1.4256

Note: LF= Laissez-faire leadership, B-Burnout, WB-Workplace Bullying

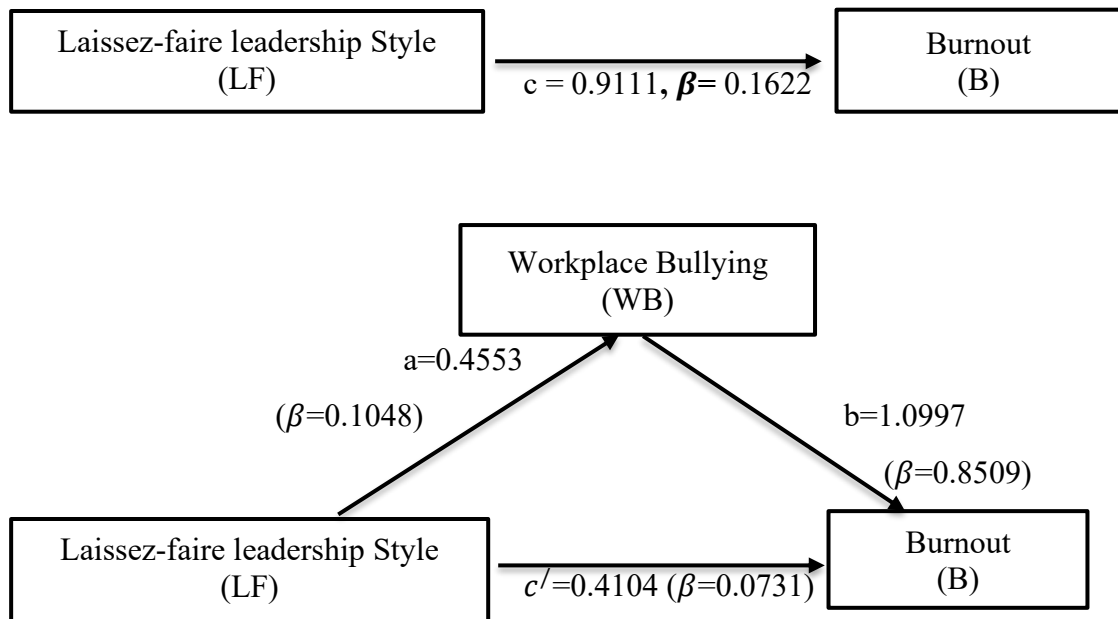


Figure 4.11.3 Workplace bullying in the relationship between laissez-faire leadership style and burnout.

Figure 4.11.3 presents the mediation model of ‘workplace bullying’ in the relationship between ‘laissez-faire leadership style’ and ‘burnout.’

A mediation analysis was conducted to examine the mediating effect of ‘workplace bullying’ on the relationship between ‘laissez-faire leadership style’ and ‘burnout’ among secondary school teachers. Table 4.11.3 shows mediation estimates for the total effect of ‘workplace bullying’ on the relationship between ‘laissez-faire leadership style’ and ‘burnout.’

The total effect of the model was found to be significant, $c = 0.9111$, 95% CI [0.3965, 1.4256], $p = .0006$. It was found that there was a statistically significant direct effect, $c' = 0.4104$, 95% CI [0.1440, 0.6768], $p = .0026$. A statistically significant indirect effect was also found, $a \times b = 0.5007$, 95% CI [0.0479, 0.9741]. These results suggested that ‘workplace bullying’ partially mediated the relationship between ‘laissez-faire leadership style’ and ‘burnout.’

In summary, these results suggested that workplace bullying partially mediated the relationship between ‘laissez-faire leadership style’ and ‘burnout,’ with an indirect effect that was statistically significant. This type of mediation occurs when the predictor variable (laissez-faire leadership style) exerts part of its influence via the mediator (workplace bullying) and part of its influence directly on the outcome variable (burnout). Therefore, the influence of ‘laissez-faire leadership style’ on ‘burnout’

occurred both directly and indirectly through workplace bullying. Since both the indirect path ($a \times b$) and the direct path (c') were significant, partial mediation was confirmed.

The direct effect accounted for approximately 45.0% of the total effect, while the indirect effect through workplace bullying contributed to approximately 55.0% ($0.5007 / 0.9111$). This indicates that more than half of the influence of laissez-faire leadership style on burnout was exerted indirectly through workplace bullying, while the remaining portion was direct.

Discussion of results

The results suggested that 'workplace bullying' partially mediated the relationship between 'laissez-faire leadership style' and 'burnout,' with a significant indirect effect. Partial mediation occurred when laissez-faire leadership influenced burnout both directly and indirectly through workplace bullying. This meant that laissez-faire leadership style increased burnout not only directly but also indirectly through increase of 'workplace bullying,' which in turn contributed to higher burnout levels. Since both the direct effect (the influence of 'laissez-faire leadership style' on 'burnout' while controlling for 'workplace bullying') and the indirect effect (the influence of 'laissez-faire leadership style' on 'burnout' through 'workplace bullying') were significant, it confirmed that workplace bullying played a crucial but not exclusive role in mediating the relationship.

The findings aligned with Okcu and Cetin (2017) in Turkey, indicating that exposure to workplace bullying significantly increased teachers' burnout levels. Similarly, Dehue, et al., (2012) in the Netherlands found that workplace bullying was strongly associated with burnout among employees, emphasising the mediating role of bullying behaviours in organisational settings. These findings emphasised the critical role of addressing workplace bullying to mitigate the adverse effects of leadership styles on teacher well-being.

Based on the findings, the hypothesis 10 which states that "there exists no significant mediating effect of workplace bullying in the relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers." is not accepted.

4.12 MODERATION ANALYSIS

The ninth objective of the study was to “To investigate whether psychological empowerment would moderate the direct and indirect relationship between perceived leadership styles (transformational, transactional, and laissez-faire) and burnout via workplace bullying.” In order to achieve this objective, moderation analysis was conducted using model 7 from Dr. Andrew F. Hayes' PROCESS macro v4.0 for SPSS (Hayes, 2017). This model assesses both the moderating effect of psychological empowerment on the direct relationship and its impact on the mediated (indirect) pathway.

4.12.1 Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transformational) of principals and burnout among secondary school teachers

Table 4.12.1 Model summary of moderation analysis

Metric	Values
R	0.2188
R ²	0.0479
MSE	271.6247
F	7.4728
df1	3
df2	446
P	0.0001

Table 4.12.1 presents the model summary for moderation analysis examining the effects of ‘perceived transformational leadership style,’ ‘psychological empowerment,’ and their interaction on ‘burnout’ among secondary school teachers.

The results revealed that the overall regression model was statistically significant, with a multiple correlation coefficient (R) of 0.2188 and a coefficient of determination (R²) of 0.0479. This indicated that the model explained approximately 4.79% of the variance in burnout. The mean squared error (MSE) was 271.6247, reflecting the average squared difference between observed and predicted burnout scores.

The model yielded an F-value of 7.4728 with (df1 = 3) and (df2 = 446) with a p-value of 0.0001, significant at 0.05, suggesting that the combination of perceived

transformational leadership style, psychological empowerment, and their interaction significantly predicted burnout among teachers. In other words, these variables together accounted for a significant proportion of variance in burnout, suggesting that these are important factors in understanding differences in burnout among secondary school teachers.

Table 4.12.2 Moderation analysis of perceived transformational leadership style, psychological empowerment, and their interaction on burnout

Predictor	Coefficient (β)	Standard Error	t	p-value
Constant	48.2411	0.79	60.49	0.0000***
TRF	-0.9392	0.24	-3.86	0.0001***
PE	-.1054	0.06	-1.68	0.0921
TRF $\times$ PE (Int_1)	-0.0106	0.01	-0.61	0.5384

Note: TRF=transformational leadership, PE=psychological empowerment, ***sign. at 0.001

The above table 4.12.2 shows the constant ($\beta = 48.2411$, $SE = 0.7975$, $t = 60.4954$, $p < .001$) represented the predicted level of burnout when both perceived transformational leadership style and psychological empowerment were at zero. This implied that in the absence of perceived transformational leadership style and psychological empowerment, the expected level of teacher burnout would be at its highest baseline level (48.24 on the burnout scale). It served as a reference point, indicating how much burnout would exist without the influence of supportive leadership or internal psychological resources.

There was a significant main effect of ‘perceived transformational leadership style’ on ‘burnout’ ($\beta = -0.9392$, $SE = 0.2430$, $t = -3.8645$, $p = .0001$). This indicated that higher levels of ‘perceived transformational leadership style’ were associated with lower burnout levels among teachers. The bias-corrected and accelerated confidence interval (BCa CI) for this effect was $[-1.42, -0.47]$, confirming the robustness of the negative association.

Although psychological empowerment also showed a negative association with burnout ($\beta = -0.1054$, $SE = 0.0625$, $t = -1.6878$, $p = .0921$), this effect was not statistically significant. The BCa CI for this predictor was $[-0.2282, -0.0173]$, suggesting a trend toward lower burnout with increased psychological empowerment, but not conclusively.

The interaction between ‘perceived transformational leadership style’ and ‘psychological empowerment’ ($\beta = -0.0106$, $SE = 0.0172$, $t = -0.6157$, $p = .5384$) was also not statistically significant, with a BCa CI of $[-0.0444, 0.0232]$. This indicated that psychological empowerment did not significantly moderate the relationship between perceived transformational leadership style and burnout. Thus, the protective effect of ‘perceived transformational leadership style’ on ‘burnout’ was consistent across low, moderate, and high levels of psychological empowerment.

Additionally, the test of the highest-order interaction ($R^2\text{-change} = 0.0008$, $p = 0.5384$) confirmed that psychological empowerment did not significantly influence the strength or direction of this relationship. From these results, it was concluded that psychological empowerment was not a moderator in this model.

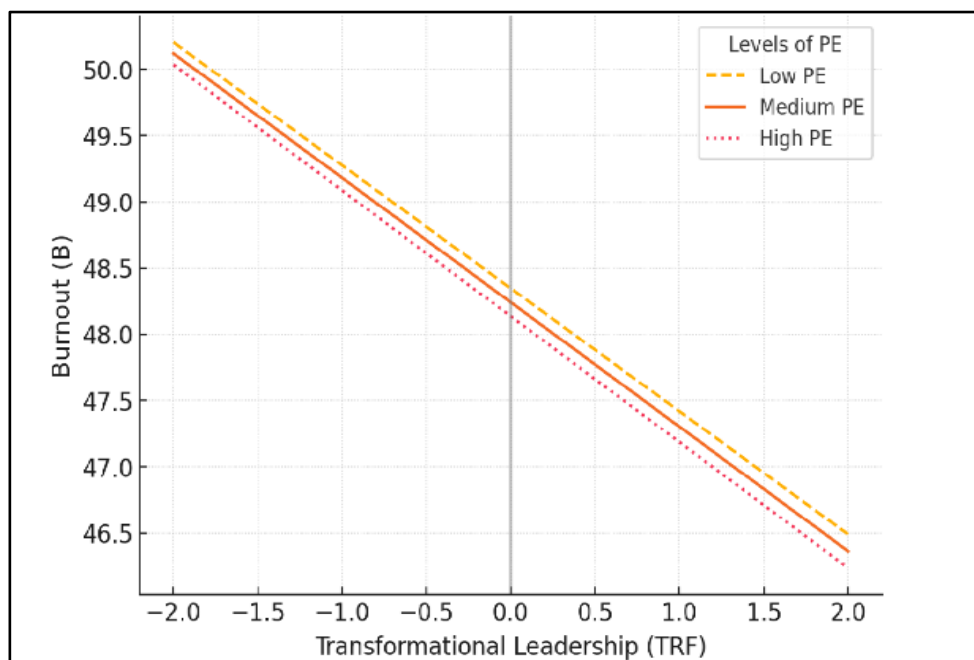


Figure 4.12.1 Psychological empowerment buffering the effect of perceived transformational leadership style on burnout

The figure shows the exact nature of conditionality (i.e., the way the relationship between two variables changes depending on the level of a third variable) that existed between perceived transformational leadership style and burnout at different levels of psychological empowerment (Low, Mean, and High). Across all levels of psychological empowerment, burnout consistently decreased as perceived transformational leadership style increased, indicated by the downward slope of all three lines. However, the nearly parallel lines showed minimal divergence, suggesting

that psychological empowerment did not significantly alter the strength or direction of the relationship between perceived transformational leadership style and burnout. Thus, psychological empowerment did not significantly moderate the relationship between ‘perceived transformational leadership style’ and ‘burnout’-its influence remained consistent regardless of the extent of perceived transformational leadership.

Discussion of results

The moderation analysis revealed that ‘psychological empowerment’ did not significantly moderate the relationship between ‘perceived transformational leadership style’ and ‘burnout.’ This finding suggested that ‘psychological empowerment’ did not buffer the direct effect of ‘perceived transformational leadership style’ on ‘burnout.’ Thus, from the results it is summed up that hypothesis 11(a) which states that “there exists no significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transformational) of principals and burnout among secondary school teachers” is accepted.

4.12.2 Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transactional) of principals and burnout among secondary school teachers

Table 4.12.3 Model summary of moderation analysis

Metric	Value
R	0.2229
R ²	0.0497
MSE	271.1077
F	7.7705
df1	3
df2	446
p	0

Table 4.12.3 presents the model summary for the moderation analysis examining the effects of ‘perceived transactional leadership style,’ ‘psychological empowerment,’ and their interaction on ‘burnout’ among secondary school teachers. The results revealed that the overall regression model was statistically significant, with a multiple correlation coefficient (R) of 0.2229 and a coefficient of determination (R²) of 0.0497. This indicated that the model explained approximately 4.97% of the variance

in burnout. The mean squared error (MSE) was 271.1077, reflecting the average squared difference between observed and predicted burnout scores.

The model yielded an F-value of 7.7705 with ($df_1 = 3$) and ($df_2 = 446$), with a p-value of 0.0000, significant at 0.001 level. This suggested that the combination of perceived transactional leadership style, psychological empowerment, and their interaction significantly predicted burnout among teachers. In other words, these variables together accounted for a significant proportion of variance in burnout, indicating that these are important factors in understanding differences in burnout among secondary school teaches.

Table 4.12.4 Moderation analysis of perceived transactional leadership style, psychological empowerment, and their interaction on burnout

Predictor	Coefficient (β)	Standard Error	t	p-value
Constant	47.9595	0.78	61.45	0.0000***
TRN	.9867	0.27	3.53	0.0005***
PE	-1.1356	0.06	-2.22	0.0266*
TRN $\times$ PE (Interaction Term)	-0.0441	0.02	-2.14	0.0327*

Note: TRN= Transactional Leadership, PE=Psychological Empowerment, *sign. at 0.05 ***sign. at 0.001

A moderation analysis was conducted to investigate whether ‘psychological empowerment’ moderated the relationship between ‘perceived transactional leadership style’ and ‘burnout’ among secondary school teachers. The results of the analysis have been summarized in Table 4.12.4.

The constant ($\beta = 47.9595$, $SE = 0.7804$, $t = 61.4537$, $p < .001$) represented the predicted level of burnout when both perceived transactional leadership style and psychological empowerment were at zero. This implied that in the absence of transactional leadership style and psychological empowerment, the expected burnout score would be at its baseline value of 47.96 on the burnout scale. This value served as a reference point for evaluating the impact of the predictors.

There was a significant main effect of perceived transactional leadership style on burnout ($\beta = .9867$, $SE = .2795$, $t = 3.5306$, $p = .0005$), with a bias-corrected and accelerated confidence interval (BCa CI) of [0.44, 1.54]. This finding, statistically

significant at 0.001 level, indicated that higher levels of perceived transactional leadership style were associated with higher burnout among teachers.

Psychological empowerment also showed a significant main effect on burnout ($\beta = -1.1356$, $SE = 0.0609$, $t = -2.2252$, $p = .0266$), with a BCa CI of $[-0.26, -0.02]$, significant at 0.05 level. This suggested that teachers with higher psychological empowerment reported lower levels of burnout.

Importantly, a significant interaction was observed between perceived transactional leadership style and psychological empowerment ($\beta = -0.0441$, $t = -2.14$, $p = .0327$), with a BCa CI of $[-0.08, -0.003]$. This indicated that ‘psychological empowerment’ significantly moderated the relationship between ‘transactional leadership’ and ‘burnout.’

Further analysis revealed that teachers with low levels of psychological empowerment experienced a stronger positive association between perceived transactional leadership style and burnout ($\beta = 1.5534$, BCa CI $[1.19, 1.50]$, $t = 17.1$, $p < 0.001$). For those with moderate level psychological empowerment, the effect between perceived transactional leadership style and burnout was weaker ($\beta = 0.9867$, BCa CI $[1.11, 1.34]$, $t = 21.3$, $p < 0.001$), and for those with high level of psychological empowerment, the association between the predictor and outcome variable further weakened and became non-significant ($\beta = 0.4200$, BCa CI $[0.30, 1.20]$, $t = 2.98$, $p = 0.2534$).

In conclusion, ‘psychological empowerment’ partially moderated the relationship between ‘perceived transactional leadership style’ and ‘burnout.’ The moderating effect suggested that the negative impact of ‘transactional leadership’ on burnout diminished as ‘psychological empowerment’ increased, highlighting the protective role of ‘psychological empowerment’ in reducing ‘burnout’ among teachers.

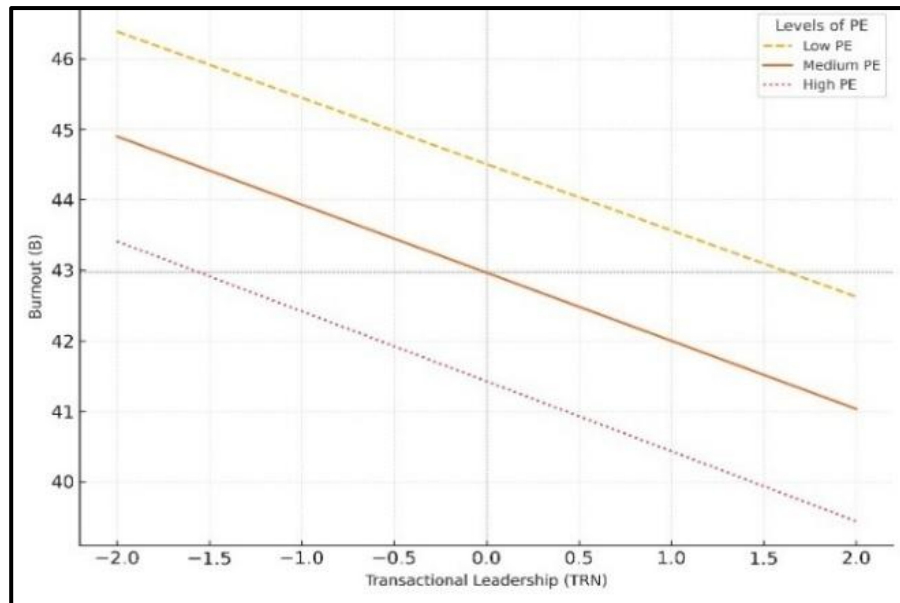


Figure 4.12.2 Psychological empowerment buffering the effect of perceived transactional leadership style on burnout

The figure shows the exact nature of conditionality (i.e., the way the relationship between two variables changes depending on the level of a third variable) that existed between perceived transactional leadership style and burnout at different levels of psychological empowerment (Low, Mean, and High). The slope of each line indicated that perceived transactional leadership style was associated with changes in burnout levels. The variation in slopes aligned with the statistical finding that the interaction effect between perceived transactional leadership style and psychological empowerment was significant ($p = 0.0327$), indicating a moderation effect. The noticeable separation between the lines suggested a meaningful difference in burnout based on levels of psychological empowerment. Specifically, at low levels of psychological empowerment, perceived transactional leadership style had a stronger positive association with burnout. In contrast, at high levels of psychological empowerment, this relationship was notably weaker. This pattern confirmed that ‘psychological empowerment’ moderated the relationship between ‘perceived transactional leadership style’ and ‘burnout,’ buffering its negative impact as psychological empowerment increased.

Discussion of results

The findings indicated that teachers with lower levels of psychological empowerment were more adversely affected by perceived transactional leadership style, experiencing higher levels of burnout. The analysis further revealed that for a majority of the sample, psychological empowerment was at a level where perceived transactional leadership style continued to exert a significant influence on burnout. This suggested that psychological empowerment acted as a buffering variable in the direct effect of perceived transactional leadership style on burnout. Specifically, ‘psychological empowerment’ mitigated the negative effect of ‘perceived transactional leadership style’ on ‘burnout,’ particularly when psychological empowerment levels were higher. Therefore, based on the results, it can be concluded that Hypothesis 11(b), which states that “there exists no significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transactional) of principals and burnout among secondary school teachers” is not accepted.

4.12.3 Results relating to the significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (Laissez-faire) of principals and burnout among secondary school teachers

Table 4.12.5 Model summary of moderation analysis

Metric	Value
R	0.2189
R ²	0.0479
MSE	271.6098
F	7.4814
df1	3
df2	446
p	0.0001

Table 4.12.5 presents the model summary for the moderation analysis examining the effects of perceived laissez-faire leadership style, psychological empowerment, and their interaction on burnout among secondary school teachers. The

results revealed that the overall regression model was statistically significant, with a multiple correlation coefficient (R) of 0.2189 and a coefficient of determination (R^2) of 0.0479. This indicated that the model explained approximately 4.79% of the variance in burnout. The mean squared error (MSE) was 271.6098, reflecting the average squared difference between observed and predicted burnout scores.

The model yielded an F-value of 7.4814 with ($df_1 = 3$) and ($df_2 = 446$), with p-value of 0.0001, significant at 0.001 level. This suggested that the combination of perceived laissez-faire leadership style, psychological empowerment, and their interaction significantly predicted burnout among the teachers. In other words, these variables together accounted for a significant proportion of variance in burnout, indicating that these are important factors in understanding differences in burnout among secondary school teachers.

Table 4.12.6 Moderation analysis of perceived laissez-faire leadership style, psychological empowerment, and their interaction on burnout

Predictor	Coefficient (β)	Standard Error	t	p-value
Constant	47.9841	0.7802	61.5016	0.0000***
LF	0.9024	0.2619	3.4495	0.0006***
PE	-1.3594	0.6069	-2.2908	0.0224*
LF $\times$ PE (Int_1)	-0.0403	0.0194	-2.0804	0.0381*

Note: LF= Laissez-faire leadership, PE=Psychological Empowerment, *sign. at 0.05 ***sign. at 0.001

A moderation analysis was conducted to examine whether ‘psychological empowerment’ moderated the relationship between ‘perceived laissez-faire leadership style’ and ‘burnout’ among secondary school teachers. The results of the analysis have been summarized in Table 4.12.6.

The constant ($\beta = 47.9841$, $SE = 0.7802$, $t = 61.5016$, $p < .001$) represented the expected level of burnout when both perceived laissez-faire leadership style and psychological empowerment were at zero. This value served as the baseline for evaluating the effect of the predictors on burnout.

There was a significant main effect of ‘perceived laissez-faire leadership style’ on ‘burnout’ ($\beta = 0.9024$, $SE = 0.2619$, $t = 3.4495$, $p = .0006$), with a bias-corrected and accelerated confidence interval (BCa CI) of [0.39, 1.42], significant at 0.001 level.

This indicated that higher levels of ‘perceived laissez-faire leadership’ were associated with increased levels of ‘burnout’ among teachers.

‘Psychological empowerment’ also had a significant main effect on ‘burnout’ ($\beta = -1.3594$, $SE = 0.6069$, $t = -2.2908$, $p = .0224$), with a BCa CI of $[-2.59, -0.02]$, significant at 0.05 level. This suggested that teachers with higher ‘psychological empowerment’ reported lower levels of ‘burnout.’

Importantly, the interaction between ‘perceived laissez-faire leadership style’ and ‘psychological empowerment’ was also statistically significant ($\beta = -0.0403$, $SE = 0.0194$, $t = -2.0804$, $p = .0381$), with a BCa CI of $[-0.08, -0.002]$, significant at 0.05 level. This indicated that ‘psychological empowerment’ significantly moderated the relationship between ‘laissez-faire leadership’ and ‘burnout.’

In conclusion, ‘psychological empowerment’ partially moderated the relationship between ‘perceived laissez-faire leadership style’ and ‘burnout.’ The findings suggested that the negative effects of ‘laissez-faire leadership’ on ‘burnout’ were stronger among teachers with low psychological empowerment and weakened as psychological empowerment increased, highlighting its role as a protective factor.

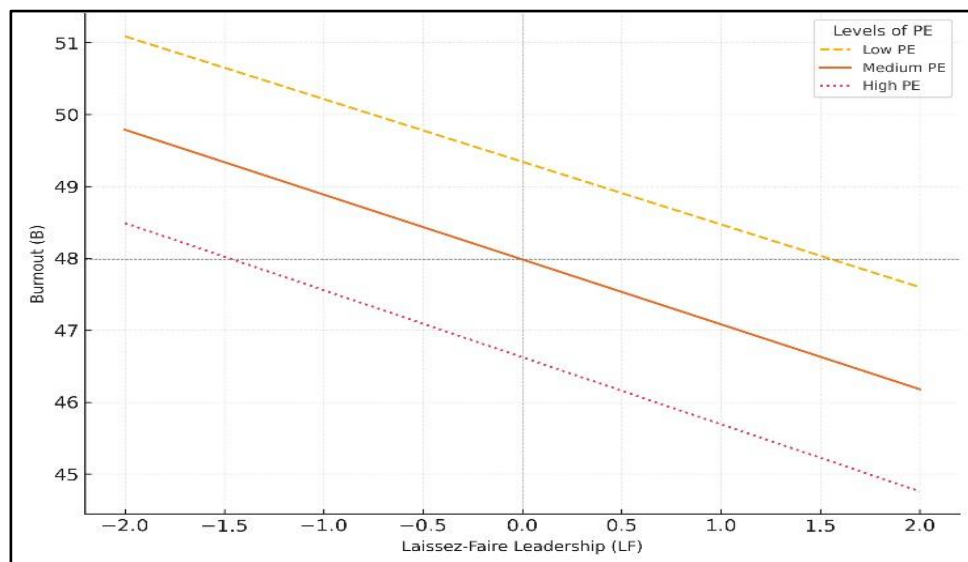


Figure 4.12.3 Psychological empowerment buffering the effect of perceived laissez-faire leadership style on burnout

The figure shows the exact nature of conditionality (i.e., the way the relationship between two variables changes depending on the level of a third variable) that existed between perceived laissez-faire leadership style and burnout at varying levels of

psychological empowerment-Low, Mean, and High. The slope of each line suggested that ‘perceived laissez-faire leadership style’ was associated with changes in ‘burnout’ levels. The differences in these slopes aligned with the statistical result indicating a significant interaction effect between perceived laissez-faire leadership style and psychological empowerment ($p=0.0381$), thereby confirming a moderation effect. The noticeable separation between the lines suggested a meaningful difference in burnout depending on the level of ‘psychological empowerment.’ Specifically, when psychological empowerment was low, perceived laissez-faire leadership style had a stronger positive association with burnout. However, as psychological empowerment increased, this relationship weakened. This trend confirmed that psychological empowerment functioned as a moderator, reducing the adverse effects of perceived laissez-faire leadership style on burnout.

Discussion of results

The findings indicated that teachers with lower levels of psychological empowerment were more adversely affected by ‘perceived laissez-faire leadership style,’ experiencing higher levels of burnout. The analysis further revealed that for a majority of the sample, psychological empowerment was at a level where perceived laissez-faire leadership style continued to exert a significant influence on burnout. This suggested that psychological empowerment acted as a buffering variable in the direct effect of ‘perceived laissez-faire leadership style’ on ‘burnout.’ Specifically, higher psychological empowerment mitigated the negative effect of perceived laissez-faire leadership style on burnout, particularly when psychological empowerment levels were higher. Therefore, based on the results, it can be concluded that Hypothesis 11(c), which states that ““there exists no significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (laissez-faire) of principals and burnout among secondary school teachers” is not accepted.

4.12.4 Results relating to psychological empowerment would not moderate the indirect relationship between perceived leadership styles (transformational, transactional, laissez- fair) and burnout

Moderated mediation analysis examined whether psychological empowerment influenced the indirect relationship between perceived leadership styles and burnout

among teachers through workplace bullying. This approach examined whether the effect of ‘leadership styles’ on ‘workplace bullying’ (path a) varied depending on the level of ‘psychological empowerment.’

The index of moderated mediation was used to check whether the indirect effects of ‘perceived leadership styles’ of principals on ‘burnout’ among teachers through ‘workplace bullying’ differed at various levels of psychological empowerment (Hayes, 2015). A significant moderated mediation effect is confirmed if the confidence intervals did not include zero, meaning that psychological empowerment influenced the strength of the mediation effect.

The hypothesized moderated mediation model (Figure 4.12.4) was tested using a bootstrapping approach to examine the significance of indirect effects at different levels of moderator (psychological empowerment). The method followed the approach described by Hayes (2013). In this model, ‘perceived leadership styles’ (transformational, transactional, and laissez-faire) were the predictor variables. Workplace bullying acted as the mediator, while burnout was the outcome variable. Psychological empowerment was tested as the moderator to determine whether it changed the strength of the mediation effect.

The analysis used the "PROCESS" macro (model 7, version 4.0) developed by Hayes (2013) in SPSS. The model was tested with bias-corrected 95% confidence intervals using 5000 bootstrap samples to determine whether the indirect (mediated) effects were moderated by psychological empowerment.

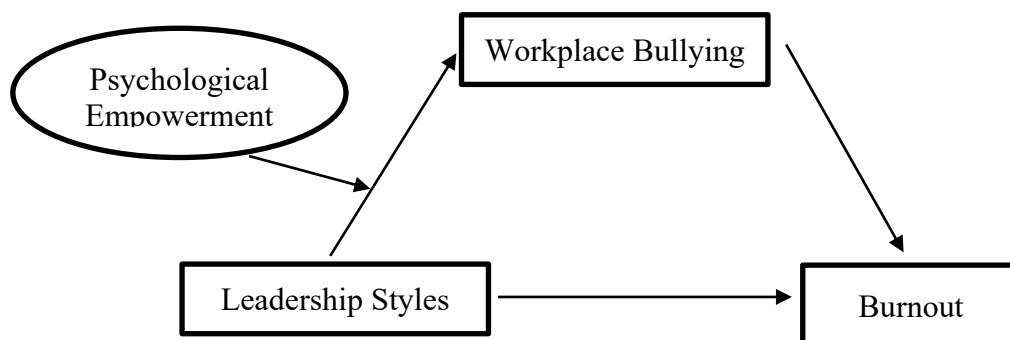


Figure 4.12.4 Hypothesised moderated mediation model

4.12.4.1 Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (transformational) of principals and burnout among secondary school teachers.

The moderated mediation analysis examined whether ‘psychological empowerment’ moderated the indirect effect of ‘perceived transformational leadership style’ of principals on ‘burnout’ through the mediating role of ‘workplace bullying.’

Table 4.12.7: Moderated mediation model of perceived transformational leadership style of principals

Predictor	Coefficient (β)	Standard Error	t-value	p-value
TRF $\rightarrow$ WB	-0.4522	0.19	-2.3805	0.0177*
PE $\rightarrow$ WB	-0.0996	0.0488	-2.0394	0.042*
TRF $\times$ PE $\rightarrow$ WB	-0.0021	0.0134	-0.1555	0.8741
TRF $\rightarrow$ B	-0.4274	0.1222	-3.4971	0.0005***
WB $\rightarrow$ B	1.0945	0.0312	35.0544	0.0***
Indirect Effect (Low PE)	-0.465	-	-	Significant
Indirect Effect (Mean PE)	-0.4949	-	-	Significant
Indirect Effect (High PE)	-0.5249	-	-	Not Significant
Index of Moderated Mediation	-0.0023	0.0142	-	Not Significant

Note: TRF= Transformational Leadership, B= Burnout, WB= Workplace Bullying, PE= Psychological Empowerment, *sign. at 0.05 ***sign. at 0.001

A moderated mediation analysis was conducted to examine whether psychological empowerment (PE) moderated the indirect effect of ‘perceived transformational leadership style’ of principals on ‘burnout’ through the mediating role of ‘workplace bullying.’ The results, as shown in Table 4.12.7, revealed that the ‘perceived transformational leadership style’ of principals had a significant direct effect on ‘workplace bullying’ ($\beta = -0.4522$, $SE = 0.1900$, $t = -2.3805$, $p = .0177$), indicating significance at 0.05 level. This suggested that greater ‘perceived transformational leadership style’ of principals was associated with lower levels of ‘workplace bullying.’

Additionally, psychological empowerment had a significant direct effect on workplace bullying ($\beta = -0.0996$, $SE = 0.0488$, $t = -2.0394$, $p = .042$), also significant

at 0.05 level. This implied that teachers who were more psychologically empowered experienced lesser workplace bullying.

However, the interaction term between ‘perceived transformational leadership style’ and ‘psychological empowerment’ ($\text{TRF} \times \text{PE}$) was not statistically significant ($\beta = -0.0021$, $\text{SE} = 0.0134$, $t = -0.1555$, $p = .8741$), as the p-value exceeded 0.05 threshold. This indicated that psychological empowerment did not moderate the relationship between perceived transformational leadership style and workplace bullying. In other words, the influence of perceived transformational leadership style of principals on workplace bullying remained consistent across all levels of ‘psychological empowerment.’

‘Perceived transformational leadership style’ of principals also had a significant direct effect on ‘burnout’ ($\beta = -0.4274$, $\text{SE} = 0.1222$, $t = -3.4971$, $p = .0005$), indicating a significant effect at 0.001 level. This suggested that teachers who perceived their principals as exhibiting more transformational leadership style reported lesser burnout. Furthermore, ‘workplace bullying’ had a strong positive effect on ‘burnout’ ($\beta = 1.0945$, $\text{SE} = 0.0312$, $t = 35.0544$, $p < .001$), confirming that higher levels of bullying were associated with increased burnout among teachers.

The conditional indirect effect analysis showed that perceived transformational leadership style indirectly reduced burnout through workplace bullying, with this indirect effect being significant at low (-0.465) and mean (-0.4949) levels of psychological empowerment, but non-significant at high levels (-0.5249).

Even though the interaction effect ($\text{TRF} \times \text{PE}$) and the index of moderated mediation are not significant, the conditional indirect effects at low and mean levels of psychological empowerment are significant (their confidence intervals exclude zero).

This indicates that the mediated pathway itself (transformational leadership $\rightarrow$ workplace bullying $\rightarrow$ burnout) exists and is statistically significant across some levels of psychological empowerment, yet the differences in the strength of that pathway from one level of empowerment to another were not statistically large enough to be considered meaningful. In other words, transformational leadership consistently reduces workplace bullying and, in turn, burnout, but the magnitude of this indirect effect does not vary significantly when comparing teachers with low, moderate, or high psychological empowerment. The mediation remains stable, even though it is more

visibly expressed at certain empowerment levels due to sampling variability rather than a true moderating effect.

Finally, the index of moderated mediation was not statistically significant (index = -0.0023, SE = 0.0142), as the p-value exceeded the 0.05 threshold. This means that the magnitude of the indirect effect of perceived transformational leadership style of principals on burnout-through workplace bullying-did not significantly differ across low, medium, or high levels of psychological empowerment. In simpler terms, although psychological empowerment had its own direct positive effect (by reducing bullying and thereby lowering burnout), it did not influence the extent to which perceived transformational leadership style of principals reduced burnout through workplace bullying. Therefore, psychological empowerment did not act as a moderator in the mediation process within this model.

Discussion of results

The results confirmed that ‘workplace bullying’ mediated the relationship between ‘perceived transformational leadership style’ of principals and ‘burnout.’ This indicated that greater ‘transformational leadership style’ of principals reduced ‘workplace bullying,’ which in turn led to decrease in burnout-showing a significant indirect effect. However, ‘psychological empowerment’ did not significantly moderate this mediation, meaning that the strength of the indirect effect of ‘perceived transformational leadership style’ on ‘burnout’ through ‘workplace bullying’ did not vary across low, medium, or high levels of psychological empowerment. In other words, the non-significant moderating role of psychological empowerment suggested that its effect operated in a direct rather than an interactional manner. While teachers with higher psychological empowerment experienced lower levels of workplace bullying and burnout, this empowerment neither amplified nor diminished the indirect influence of transformational leadership on burnout via workplace bullying. This implies that psychological empowerment contributed independently to teachers’ well-being without modifying the pathway through which transformational leadership helped reduce burnout. Practically, this means that even among highly empowered

teachers, the positive impact of ‘transformational leadership’ in alleviating ‘burnout’ through the reduction of ‘workplace bullying’ remained steady.

Based on the results, Hypothesis 12(a), which stated that “there exists no significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership styles (transformational) of principals and burnout among secondary school teachers,” is accepted. These findings suggested that while both perceived transformational leadership style and psychological empowerment helped reduce burnout on their own, psychological empowerment did not change how transformational leadership reduced burnout through workplace bullying.

4.12.4.2 Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (transactional) of principals and burnout among secondary school teachers.

The moderated mediation analysis examined whether psychological empowerment moderated the indirect effect of workplace bullying in the relationship between perceived transactional leadership style and burnout.

Table 4.12.8: Moderated mediation model of perceived transactional leadership style of principals

Predictor	Coefficient (β)	Standard Error	t-value	p-value
TRN $\rightarrow$ WB	0.4954	0.2178	2.2744	0.0234*
PE $\rightarrow$ WB	-0.1115	0.0475	-2.3492	0.0193*
TRN $\times$ PE $\rightarrow$ WB	-0.0354	0.016	-2.2089	0.0277*
TRN $\rightarrow$ B	0.443	0.1447	3.0605	0.0023**
WB $\rightarrow$ B	1.0991	0.0312	35.219	0.0***
Indirect Effect (Low PE)	1.0449	-	-	Significant
Indirect Effect (Mean PE)	0.5445	-	-	Significant
Indirect Effect (High PE)	0.04	-	-	Not Significant
Index of Moderated Mediation	-0.0389	0.0186	-	Significant

Note: TRF= Transactional Leadership, B= Burnout, WB= Workplace Bullying, PE= Psychological Empowerment, *sign. at 0.05, ** sign at 0.01, ***sign. at 0.001

A moderated mediation analysis was conducted to examine whether psychological empowerment (PE) moderated the indirect effect of ‘perceived transactional leadership style’ of principals on ‘burnout’ through the mediating role of

‘workplace bullying.’ The results, as shown in Table 4.12.8, revealed that the perceived transactional leadership style of principals had a significant direct effect on workplace bullying ($\beta = 0.4954$, $SE = 0.2178$, $t = 2.2744$, $p = .0234$), indicating significance at the 0.05 level. This suggested that greater reliance on transactional leadership style was associated with higher experiences of workplace bullying among teachers.

Additionally, psychological empowerment had a significant direct effect on workplace bullying ($\beta = -0.1115$, $SE = 0.0475$, $t = -2.3492$, $p = .0193$), also significant at the 0.05 level. This indicated that teachers with higher psychological empowerment perceived lower levels of workplace bullying.

The interaction term between perceived transactional leadership style and psychological empowerment ($TRN \times PE$) was statistically significant ($\beta = -0.0354$, $SE = 0.0160$, $t = -2.2089$, $p = .0277$), confirming that psychological empowerment moderated the relationship between transactional leadership and workplace bullying. This suggested that the positive relationship between transactional leadership and workplace bullying weakened as psychological empowerment increased, demonstrating a buffering effect.

Perceived transactional leadership style of principals also had a significant direct effect on burnout ($\beta = 0.4430$, $SE = 0.1447$, $t = 3.0605$, $p = .0023$), indicating significance at the 0.01 level. Furthermore, workplace bullying had a strong positive effect on burnout ($\beta = 1.0991$, $SE = 0.0312$, $t = 35.219$, $p < .001$), confirming that higher levels of workplace bullying were associated with increased burnout among teachers.

The conditional indirect effects analysis showed that perceived transactional leadership style indirectly increased burnout through workplace bullying, with this indirect effect being significant at low ($\beta = 1.0449$) and mean ($\beta = 0.5445$) levels of psychological empowerment, but non-significant at high ($\beta = 0.0400$) levels.

Since both the interaction effect ($TRN \times PE$) and the index of moderated mediation were statistically significant (index = -0.0389 , $SE = 0.0186$), it confirmed that the strength of the indirect effect varied across levels of psychological empowerment.

This indicated that the mediated pathway itself (transactional leadership $\rightarrow$ workplace bullying $\rightarrow$ burnout) exists and is statistically significant across some levels of psychological empowerment; however, the differences in the strength of that

pathway from one level of empowerment to another were large enough to be meaningful. In other words, transactional leadership tended to increase workplace bullying and, consequently, burnout among teachers, but the magnitude of this indirect effect diminished significantly as psychological empowerment increased.

Finally, the index of moderated mediation was statistically significant (index = -0.0389 , $SE = 0.0186$), indicating that the strength of the indirect effect of perceived transactional leadership style of principals on burnout-through workplace bullying-varied across different levels of psychological empowerment. In simpler terms, while transactional leadership tended to increase workplace bullying and, consequently, burnout, this indirect relationship weakened significantly as teachers' psychological empowerment increased. Thus, psychological empowerment acted as a protective factor, buffering teachers from the adverse effects of transactional leadership by reducing the intensity of bullying and, in turn, mitigating burnout.

Discussion of results

The findings confirmed that perceived transactional leadership style of principals contributed to teacher burnout both directly and indirectly through increased workplace bullying. However, 'psychological empowerment' emerged as a protective moderator that reduced the intensity of this indirect relationship. The indirect effect of transactional leadership on burnout through bullying was significant at low and moderate levels of empowerment, indicating that teachers with lower psychological empowerment were more vulnerable to bullying and burnout. At high levels of empowerment, this indirect effect became non-significant, suggesting that empowered teachers were better equipped to cope with the adverse effects of transactional leadership.

Thus, as psychological empowerment increased from low to high, the negative impact of transactional leadership on burnout via workplace bullying diminished substantially, reinforcing its role as a crucial buffer against workplace stressors. Based on these results, Hypothesis 12(b) which states that "there exists no significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived transactional leadership style of principals and burnout among secondary school teachers" is not accepted. These

findings highlight the importance of fostering psychological empowerment among teachers to cultivate supportive work environments and enhance teacher well-being.

4.12.4.3 Results relating to the significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership style (laissez-faire) of principals and burnout among secondary school teachers.

The moderated mediation analysis examined whether ‘psychological empowerment’ moderated the indirect effect of ‘workplace bullying’ on the relationship between ‘perceived laissez-faire leadership style’ and ‘burnout.’

Table 4.12.9: Moderated mediation model of perceived laissez-faire leadership style of principals

Predictor	Coefficient (β)	Standard Error	t-value	p-value
LF $\rightarrow$ WB	0.4485	0.204	2.199	0.0284*
PE $\rightarrow$ WB	-0.1137	0.0474	-2.3965	0.017*
LF $\times$ PE $\rightarrow$ WB	-0.0332	0.0151	-2.1959	0.0286*
LF $\rightarrow$ B	0.4104	0.1356	3.0274	0.0026**
WB $\rightarrow$ B	1.0997	0.0312	35.2526	0.0***
Indirect Effect (Low PE)	0.962	0.3021	-	Significant
Indirect Effect (Mean PE)	0.493	0.2213	-	Significant
Indirect Effect (High PE)	0.0245	0.3378	-	Not Significant
Index of Moderated Mediation	-0.0365	0.018	-	Significant

Note: LF= Laissez-faire leadership, B=Burnout, WB=Workplace Bullying, PE= Psychological Empowerment, *sign. at 0.05, **sign at 0.01, ***sign. at 0.001

A moderated mediation analysis was conducted to examine whether psychological empowerment (PE) moderated the indirect effect of ‘perceived laissez-faire leadership style’ of principals on ‘burnout’ through the mediating role of ‘workplace bullying.’ The results, as shown in Table 4.12.9, revealed that the perceived laissez-faire leadership style of principals had a significant direct effect on workplace bullying ($\beta = 0.4485$, $SE = 0.2040$, $t = 2.199$, $p = .0284$), indicating significance at the 0.05 level. This suggested that higher perceptions of laissez-faire leadership were associated with increased experiences of workplace bullying among teachers.

Additionally, psychological empowerment had a significant direct effect on workplace bullying ($\beta = -0.1137$, $SE = 0.0474$, $t = -2.3965$, $p = .017$), also significant

at the 0.05 level. This indicated that teachers with higher levels of psychological empowerment reported fewer experiences of workplace bullying.

The interaction term between perceived laissez-faire leadership style and psychological empowerment ($LF \times PE$) was statistically significant ($\beta = -0.0332$, $SE = 0.0151$, $t = -2.1959$, $p = .0286$), confirming that psychological empowerment moderated the relationship between laissez-faire leadership and workplace bullying. This suggested that the positive association between laissez-faire leadership and workplace bullying weakened as psychological empowerment increased, reflecting a buffering effect.

Perceived laissez-faire leadership style of principals also had a significant direct effect on burnout ($\beta = 0.4104$, $SE = 0.1356$, $t = 3.0274$, $p = .0026$), indicating significance at the 0.01 level. Furthermore, workplace bullying had a strong positive effect on burnout ($\beta = 1.0997$, $SE = 0.0312$, $t = 35.2526$, $p < .001$), confirming that higher levels of workplace bullying were associated with greater burnout among teachers.

The conditional indirect effects analysis showed that the indirect effect of perceived laissez-faire leadership style on burnout through workplace bullying was significant at low ($\beta = 0.962$, $p < .01$) and mean ($\beta = 0.493$, $p < .05$) levels of psychological empowerment but non-significant at the high level ($\beta = 0.0245$, $p > .05$).

Finally, the index of moderated mediation was statistically significant (index = -0.0365 , $SE = 0.0180$), confirming that the strength of the indirect effect varied across levels of psychological empowerment. This provides clear evidence of a significant moderated mediation effect, demonstrating that psychological empowerment mitigated the adverse influence of laissez-faire leadership style of principals on burnout by weakening its indirect pathway through workplace bullying. In other words, laissez-faire leadership tended to increase workplace bullying and, consequently, teacher burnout, but this negative indirect effect diminished substantially as psychological empowerment increased, highlighting its role as a protective factor against the detrimental effects of passive leadership.

Discussion of Results

The results confirmed that perceived laissez-faire leadership style of principals contributed to teacher burnout both directly and indirectly through increased workplace

bullying. However, psychological empowerment acted as a protective factor, reducing both the occurrence of bullying and the strength of the indirect pathway from leadership to burnout. The indirect effect of laissez-faire leadership on burnout through bullying was significant at low and mean levels of empowerment, suggesting that teachers with lower psychological empowerment were more vulnerable to workplace bullying and subsequent burnout. At high levels of empowerment, this indirect effect became non-significant, implying that psychologically empowered teachers were better equipped to buffer the negative effects of 'laissez-faire leadership.'

As psychological empowerment increased from low to high, the detrimental impact of 'laissez-faire leadership' on 'burnout' via 'workplace bullying' substantially diminished, reinforcing its role as a critical buffer against workplace stressors. Therefore, Hypothesis 12(c) which states that "there exists no significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership styles (laissez-faire) of principals and burnout among secondary school teachers" is not accepted. These findings underscore the pivotal role of psychological empowerment in reducing the negative consequences of passive leadership and fostering healthier, more supportive work environments for teachers.

CHAPTER – V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The preceding chapter discussed the analysis and interpretation of the data, whereas the current chapter provides a summary of the key findings, presents the conclusions, and outlines recommendations for future research. In the preceding chapter, the results were analysed in alignment with the study's objectives, offering detailed interpretation of the data. This chapter builds upon those findings by critically discussing their implications. Such discussions are crucial to provide context and significance to the results, ensuring that the research contributes meaningfully to the field. Without this analysis, the research would lack practical or theoretical impact. Therefore, this chapter was dedicated to presenting the major findings, discussing their relevance, and formulating conclusions derived from the research results, as well as offering suggestions for future investigations.

5.1 Summary

The statement, “The destiny of India is being shaped in her classroom” (Kothari Commission Education Report, 1964–66) encapsulates the pivotal role education plays in societal transformation. In alignment with this vision, ‘the National Education Policy (NEP, 2020)’ emphasises that quality education is foundational to economic, social, and political progress. Teachers, as the central agents of this transformation, are entrusted with nurturing responsible, critically engaged citizens. However, the increasing complexity of teaching-driven by evolving policies, technological integration, and social demands-has intensified the pressures on teachers, placing their well-being at risk. The NEP (2020) recognizes that teacher well-being is central to delivering high-quality education and achieving sustainable development goals.

Among institutional factors influencing teacher well-being, the leadership style of school principals emerged as particularly critical. Perceived leadership style referred to how teachers experienced and interpreted the behaviours, decisions, and interpersonal interactions of their school leaders. Transformational leadership style, defined by Bass and Riggio (2006) as a style that motivates followers to exceed expectations by appealing to higher ideals and values, cultivated a positive school climate. Characterised by ‘idealised influence,’ ‘inspirational motivation,’ ‘intellectual

stimulation,’ and ‘individualised consideration,’ ‘transformational leadership style’ fostered motivation, emotional support, and professional development. In contrast, ‘transactional leadership style’-based on compliance through performance-linked rewards and punishments (Burns, 1978, as cited in Bass & Avolio, 2004)-proved less effective in addressing the emotional needs of teachers. ‘Laissez-faire leadership style’, marked by inaction and avoidance of decision-making (Bass, 1999, as cited in Judge & Piccolo, 2004), was associated with role ambiguity, insufficient support, and heightened stress levels.

To assess these styles, the present study employed the “Teachers’ Perception of Their School Principal Leadership Style Questionnaire by Uri Even and Iris BenDavid-Hadar (2021),” which operationalised leadership into three styles: “transformational, transactional, and laissez-faire”. This comprehensive instrument was designed to assess how teachers perceived the leadership style of their school principals. By focusing on these three primary dimensions, the tool provided valuable insights into how different leadership styles influenced teacher motivation, job satisfaction, and overall well-being within the school environment.

Teacher burnout, which has emerged as a significant concern across global education systems, typically occurred when prolonged workplace stress remained unaddressed. The ‘World Health Organisation (WHO, 2019)’ defined burnout as “a syndrome characterised by emotional exhaustion, depersonalisation, and reduced professional efficacy, resulting from continuous exposure to job-related stressors.” This condition carried serious implications for both teacher well-being and the quality of education.

In the present study, burnout was assessed using the “Copenhagen Burnout Inventory (CBI)”, which examined three distinct domains: ‘personal burnout’, ‘work-related burnout,’ and ‘client-related burnout’-where students were considered the primary clients. These dimensions helped to differentiate between internal, occupational, and interpersonal sources of burnout, thereby providing a detailed and holistic perspective on its underlying causes and effects.

Building on the established link between ‘leadership styles’ and ‘burnout,’ the study further examined workplace bullying as a contributing factor that influences this relationship. ‘Workplace bullying’ was defined by Einarsen et al. (2003) as “harassing,

offending, socially excluding someone or negatively affecting someone's work tasks," with such behaviours occurring repeatedly (e.g., weekly) and over a prolonged period (e.g., about six months), making it difficult for the target to defend themselves (Einarsen et al., 2003). These behaviours were assessed using the "Negative Acts Questionnaire–Revised (NAQ-R)," a validated tool that identified bullying across three domains: 'person-related bullying' (e.g., being ignored or subjected to gossip), 'work-related bullying' (e.g., unreasonable deadlines or excessive monitoring), and 'physically intimidating bullying' (e.g., shouting or threats). According to the 'Negative Acts Questionnaire-Revised (NAQ-R)', 'workplace bullying' was assessed through exposure to specific negative behaviours rather than relying on self-labelling. The NAQ-R defined bullying as the experience of two or more of these negative acts on a regular basis over a prolonged period, aligning with the conceptualisation of bullying as a persistent and systematic pattern of mistreatment in the workplace.

Such negative behaviours within the school environment were found to significantly heighten emotional strain, and accelerate the onset of burnout. Poor leadership practices, particularly those lacking clear direction or emotional support, often allowed workplace bullying to persist or go unaddressed, further deteriorating workplace relationships and increasing stress among teachers.

At the same time, the internal resources of teachers themselves were found to be important in shaping how they experienced and responded to their work environment. Psychological empowerment emerged as a key factor in this regard. Drawing from Bandura's (1977) theory of self-efficacy, 'psychological empowerment' was conceptualised as a motivational state encompassing four dimensions: "meaning, competence, self-determination, and impact" (Spreitzer, 1995). These dimensions encompassed a teacher's sense of purpose in their work, confidence in their abilities, autonomy in decision-making, and belief in their ability to influence outcomes.

The "Psychological Empowerment Scale (PES)", developed by Spreitzer, was used in this study to assess these attributes. Teachers who felt psychologically empowered were more likely to exhibit resilience, manage stress effectively, and withstand the negative effects of 'workplace bullying' and unsupportive leadership styles.

Together, these constructs- ‘perceived leadership styles,’ ‘burnout,’ ‘workplace bullying,’ and ‘psychological empowerment’-formed the core of the present study. Guided by the ‘Job Demands-Resources (JD-R) theory’ (Demerouti et al., 2001), the study examined how ‘job demands’ (e.g., workplace bullying) and ‘job resources’ (e.g., supportive leadership, psychological empowerment) interacted to influence burnout. The study applied Hayes' PROCESS macro-Model 7, which allowed for an analysis of ‘workplace bullying’ as a mediator and ‘psychological empowerment’ as a moderator in the relationship between ‘perceived leadership styles’ and ‘teacher burnout.’

In this study, secondary school teachers were selected due to the critical role this stage plays in students' development. During the secondary stage, students begin to cultivate independent thinking skills, and teachers emphasise fostering the habit of ‘how to think’ rather than ‘what to think’ (Van der et al., 2017). The term "secondary school teachers" in this context refers to those teaching classes 9–10, holding a graduation degree with a B.Ed., and working in government and private schools affiliated to/recognised by the Board of Secondary Education, Assam.

Significance

Teacher well-being has been increasingly recognised as a critical factor in the overall success of educational systems. The NEP (2020) emphasises that the well-being of teachers is fundamental to their effectiveness and to the development of students, calling for substantial reforms in teacher support, workload management, and professional development. It highlights that overworked and unsupported teachers are less able to provide high-quality education, which directly affects student outcomes. Studies further suggest that teacher well-being has been linked to job satisfaction, stress levels, and retention rates (Gu & Day, 2007). Promoting teacher well-being involves addressing mental health, providing professional autonomy, fostering supportive leadership, and creating a positive school climate (Collie et al., 2012). Prioritising teacher well-being not only benefits teachers but also enhances the educational experiences of students, ensuring a healthier and more effective learning environment.

Burnout, a psychological syndrome has long been recognised as a major occupational hazard in helping professions such as education (Vash, 1980, as cited in Al-Omari et al., 2008), and has become increasingly prevalent among teachers both

globally and in India. In India, several recent studies and surveys documented the intensifying pressures on teachers, which have led to rising stress and burnout levels. A LinkedIn 'Future of Work' survey (2023) reported that 35% of Indian professionals experienced burnout due to excessive workload, while an earlier Microsoft Work Trend Index (2020) found India ranked second in Asia for employee burnout. In a 2024 survey by Zamit, 55% of Indian teachers reported facing stress-related challenges, while the Teacher Wellbeing Index (2021) in the UK echoed similar findings, with 72% of teachers reporting high stress and 46% considering leaving the profession.

Research conducted in various countries has confirmed the serious nature of burnout. For instance, the NEA (2022) in the US found that 55% of teachers experienced burnout symptoms. In Australia, 30% of early-career teachers left the profession within the first year (Goddard et al., 2006). Similar trends were observed in Hong Kong, Israel, and the UK, pointing to the global nature of this issue. Teacher burnout not only compromises educator health but also leads to absenteeism, reduced instructional quality, and attrition, thereby undermining educational continuity and student success.

Similarly, 'workplace bullying' has emerged as a significant organisational concern, strongly associated with burnout and adverse work environments. Bullying in the workplace-whether through exclusion, verbal abuse, or undue criticism-creates psychological distress, reduces productivity, and contributes to burnout. Research by Einarsen (1999), Hutchinson (2014), Karatza et al. (2017), and Uhm & Yoon (2016) highlighted the widespread prevalence of bullying in diverse work contexts including education. Global surveys suggested that up to 45% of European employees and 36% of American workers experienced workplace bullying, while Indian surveys by Careerbuilder.in (2020) and Monster.com (2023) reported workplace bullying rates as high as 55% and indirect witnessing of harassment at 94%. Workplace bullying, as highlighted in UNESCO's (2021) Global Education Monitoring Report, exacerbates teacher stress and emotional exhaustion, leading to higher rates of burnout, particularly when coupled with a lack of support from school leadership.

In India, bullying has remained underreported in academic contexts despite its serious implications. Studies by D'Cruz & Rayner (2013), Ciby & Raya (2014), and Gupta (2017) found evidence of workplace bullying in various sectors including

education. Media reports had also brought further attention to the issue. The growing body of international and national evidence affirmed that bullying significantly contributed to burnout and adversely affected employee morale and retention.

Amid these challenges, ‘psychological empowerment’ has been identified as a potential protective factor. Research has shown that psychologically empowered employees were better equipped to cope with stress and were less susceptible to ‘burnout’ and ‘workplace bullying.’ Despite its potential, limited studies in Indian educational contexts have examined the role of ‘psychological empowerment’ in conjunction with ‘leadership styles’ and ‘workplace bullying.’

The current research aimed to ignite further investigation into the relatively unexplored areas of ‘perceived leadership styles,’ ‘burnout,’ ‘workplace bullying,’ and ‘psychological empowerment’ within the context of Indian educational settings. While numerous studies have examined various aspects of teacher well-being and effectiveness, there remains a noticeable gap in literature exploring how these factors interact, particularly in relation to teacher burnout. Despite the growing importance of leadership styles and psychological empowerment in mitigating stress and creating positive school environments, studies specifically addressing the combined impact of ‘leadership styles,’ ‘workplace bullying,’ and ‘psychological empowerment’ on teacher burnout have been limited in Indian educational contexts. This study, therefore, sought to break new ground by examining how these variables influenced each other, offering fresh insights into teacher well-being and contributing to the relatively sparse body of research on these topics in India. This study offered valuable insights for educational leaders and policymakers seeking to enhance teacher well-being and reduce burnout.

Hence, the paucity of research concerning the interrelationship among perceived leadership styles, workplace bullying, psychological empowerment, and teacher burnout-particularly within the Indian educational context-combined with inconsistencies in existing findings and the growing concern for enhancing teacher well-being and educational quality, motivated the investigator to undertake the present study. The pressing need to ensure a supportive and empowering school environment for teachers, in alignment with national priorities such as the NEP (2020) and global objectives like the Sustainable Development Goals, further reinforced the relevance and urgency of this investigation.

Statement of the problem

“PERCEIVED LEADERSHIP STYLES OF PRINCIPALS AND BURNOUT AMONG SECONDARY SCHOOL TEACHERS OF ASSAM: ROLE OF WORKPLACE BULLYING AND PSYCHOLOGICAL EMPOWERMENT”

Objectives:

The objectives of the study were as follows:

- 1.To explore the leadership styles of principals as perceived by secondary school teachers.
- 2.To explore the levels of burnout and psychological empowerment among secondary school teachers.
- 3.To find out the frequency and forms of workplace bullying among secondary school teachers.
4. To compare the perceived leadership styles of principals, level of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment among teachers with respect to gender, type of school, experience and locality.
- 5.To find out the relationship of perceived leadership styles of principals (transformational, transactional and laissez-faire) with burnout, workplace bullying and psychological empowerment among secondary school teachers.
- 6.To find out the relationship of psychological empowerment with workplace bullying among secondary school teachers.
7. To find out the relationship between workplace bullying and burnout among secondary school teachers.
8. To investigate the mediating role of workplace bullying on the relationship between perceived leadership styles of principals (transformational, transactional and laissez-faire) and burnout.
9. To investigate whether psychological empowerment would moderate the direct and indirect relationship between perceived leadership styles (transformational, transactional and laissez-faire) and burnout via workplace bullying.

Hypotheses:

Based on the objectives the following hypotheses were formulated:

H₀₁: There exists no significant difference in perceived leadership styles of principals with respect to gender, locality, experience, and type of school.

H₀₂: There exists no significant difference in level of burnout among secondary school teachers with respect to gender, locality, experience, and type of school.

H₀₃: There exists no significant difference in frequency and forms of workplace bullying of secondary school teachers with respect to gender, locality, experience, and type of school.

H₀₄: There exists no significant difference in level of psychological empowerment of secondary school teachers with respect to gender, locality, experience, and type of school.

H₀₅: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

H₀₆: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- faire) of principals and workplace bullying.

H₀₇: There exists no significant relationship between perceived leadership styles (transformational, transactional, laissez- faire) of principals and psychological empowerment.

H₀₈: There exists no significant relationship between psychological empowerment and workplace bullying among secondary school teachers.

H₀₉: There exists no significant relationship between workplace bullying and burnout among secondary school teachers.

H₁₀: There exists no significant mediating effect of workplace bullying in the relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

H₁₁: There exists no significant moderating effect of psychological empowerment in the direct relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

H₁₂: There exists no significant moderating effect of psychological empowerment on the indirect effect of workplace bullying in the relationship between perceived leadership styles (transformational, transactional, laissez-faire) of principals and burnout among secondary school teachers.

Research Design

The aim of a research design is to supply comprehensive information pertinent to the research problem with minimal expense. This study was conducted to examine the perceived leadership styles of principals and burnout among secondary school teachers in relation to workplace bullying and psychological empowerment in the two districts namely Dibrugarh and Tinsukia, specifically covering the Tengakhat Block of Dibrugarh district and the Hapjan Block of Tinsukia district of Upper Assam region. All the four tools employed, namely, "Teachers' perception of their school principal leadership style questionnaire (2021); Copenhagen burnout inventory (2005); Negative acts questionnaire-revised (2009) and Psychological empowerment scale (1995)" were administered on the secondary school teachers teaching in government schools and private schools affiliated to/recognised by SEBA, Assam.

Method and Sample

As per the objectives and hypotheses of the study, the investigator employed descriptive survey method. The population for the study included all the teachers serving in secondary schools of Assam affiliated to/recognised by SEBA. Stratified multistage random sampling method was employed. Two districts namely Dibrugarh and Tinsukia of Upper Assam region were taken. For the selection of districts from the region, districts comparable in Socioeconomic status (SES) and with considerable gap

in Socioeconomic status were taken into consideration. Out of the 6 educational blocks in Dibrugarh and 5 in Tinsukia, one block from each district was selected, depending upon the availability of government and private secondary schools both in rural and urban areas.

From each of the selected educational blocks, fifty-seven (57) schools (35 rural, 22 urban) from Tengakhat block of Dibrugarh; seventy-nine (79) schools (41 rural, 38 urban) from Hapjan block of Tinsukia were selected. Further out of these only those schools were selected from each of the educational block which had teachers of all experiences 'less than 5 years', '5-10 years' and '10 years and above'. On the basis of a sample size calculator, a sample of 384 was sufficient, but in order to overcome the problem of unengaged responses, missing values and outliers oversampling was done and a sample of 470 was collected. To collect data for the present study, the investigator personally approached secondary school teachers, ultimately exceeding the initially calculated sample size of 384. Some teachers either did not respond or submitted incomplete forms; therefore, following the data cleaning procedures recommended by Hair et al. (2010), cases with missing or unengaged responses were removed. In addition, the Mahalanobis distance method was applied to detect and eliminate multivariate outliers, ensuring the integrity and normality of the dataset. Consequently, a final representative sample of 450 secondary school teachers (183 males and 267 females) was selected from the Tengakhat Block of Dibrugarh district and the Hapjan Block of Tinsukia district of Upper Assam for further analysis and interpretation.

Tools Used

1. Teachers' perception of their school principal leadership style questionnaire by Uri Even & Iris Ben David-Hadar (2021)
2. Copenhagen Burnout Inventory by Tage S. Kristensen, Marianne Borritz, Ebba Villadsen, and Karl B. Christensen (2005)
3. Negative Acts Questionnaire-Revised by Stale Einarsen, Helge Hoel, and Guy Notelaers (2009)
4. Psychological Empowerment Scale by Gretchen M. Spreitzer (1995)

Procedure of Data Collection

For the present study, the investigator himself personally collected the data. Due permission was taken from the Head of Institutes to collect data from teachers teaching in the secondary schools of Assam affiliated to/recognised by SEBA, Assam. After taking permission from the Heads of the concerned institutions, time was fixed in advance, before the actual administration of tools. The broader aim of the research was made clear to the teachers and all their doubts regarding the filling of the personal data and mode of giving replies in the questionnaire and scales were removed. The respondents were motivated to give answers carefully and truthfully. It was assured to the respondents that their results would be kept confidential and would be used for research purposes only. The study required the inclusion of secondary school teachers from both government and private schools. It took 6-7 months for data collection. Then on these selected teachers all the four tests, namely, “Teachers’ Perception of Their School Principal Leadership Style Questionnaire,” “Copenhagen Burnout Inventory,” “Negative Acts Questionnaire-R,” and “Psychological Empowerment Scale” were administered. In this way, the total data was collected from all the schools, that is, government and private from each selected district belonging to Upper Assam region. The districts selected for data collection were Dibrugarh and Tinsukia. The data for this study was obtained by the investigator himself.

Statistical Techniques used

1. In descriptive statistics, mean, SD and percentage analysis were used.
2. In inferential statistics, t-test, correlation, One way ANOVA, Chi-square test of independence was used.
3. Mediation and Moderation analysis through Process Macro in 23 SPSS and AMOS were used.

Graphical representation of data

Graphical representation of data was done, wherever possible and required.

5.2 Conclusions

After analysing the data, objective-wise following conclusions drawn for the study have been presented below.

Leadership styles of principals as perceived by secondary school teachers

- Majority of teachers (76.44%) perceived their principals to exhibit transformational leadership style, followed by a smaller group of teachers (18.22%) who perceived them to exhibit transactional leadership style, and only (5.33%) of teachers reported their principals as exhibiting laissez-faire leadership style.

Levels of burnout and psychological empowerment among secondary school teachers

- Most of the teachers (47.78%) experienced low levels of personal burnout, with fewer (39.11%) reporting moderate levels, and only a small portion (13.11%) experiencing high personal burnout.
- A substantial proportion of teachers reported a high level of work-related burnout (38.44%), followed by (31.77%) who experienced low level, and (29.77%) who experienced moderate level of work-related burnout.
- Most of the teachers (76.67%) reported low level of student-related burnout, followed by (22.66%) teachers who experienced moderate level, and a small proportion (0.67%) who reported a high level.
- Overall burnout appeared to be low for a significant portion of teachers (61.55%), with fewer (21.56%) falling into the moderate category, and an even smaller proportion (16.89%) reporting a high level of burnout.
- Most teachers (77.5%) experienced low level of meaning, followed by smaller proportion with moderate (11.56%) and high (10.89%) level of meaning.
- Majority of teachers (50.67%) experienced low level of impact, followed by moderate (27.78%) and high (21.56%) level of impact, indicating that fewer teachers experienced stronger perceptions of impact in their work.
- Most teachers (39.56%) experienced a moderate level of competence, followed by high (30.89%) and low (29.56%) level of competence.

- Majority of teachers i.e., 51.1% experienced low level of self-determination among teachers, with moderate level experienced by 32.44%, and high level by only 16.44%.
- Most of the teachers (50.9%) experienced low level of overall psychological empowerment, followed by (26.67%) of teachers at moderate level and (22.44%) teachers at high level of overall psychological empowerment.

Frequency and forms of workplace bullying among secondary school teachers

- A significant number of teachers (58.7%) reported no experience of ‘workplace bullying’ in the past six months, while a substantial portion (33.8%) reported rare instances and only a few (7.6%) mentioned occasional bullying. Notably, no teachers reported being bullied several times per week or almost daily.
- A large segment of teachers (78%) reported no experience of person-related bullying, whereas a smaller number of teachers (22%) reported occasional experiences, while there were no instances of severe ‘person-related bullying.’
- ‘Work-related bullying’ was occasionally experienced by a notable number of teachers (55.33%), while a smaller number (33.11%) reported no such experiences, and (11.55%) experienced more severe form of bullying.
- A significant number of teachers (53.78%), reported occasional physically intimidating bullying, with fewer (34%) having no such experiences; and a smaller group (11.78%) reported more severe bullying.
- Overall, substantial number of teachers (53.77%) indicated no exposure to workplace bullying, while a fair number (42.22%) experienced it occasionally, and a small proportion (4%) reported severe bullying.

Comparison of perceived leadership styles of principals with respect to gender, type of school, experience, and locality

- Male and female secondary school teachers differed significantly in their perception related to ‘leadership styles’ viz., ‘transformational,’ ‘transactional,’ and ‘laissez-faire’ of their principals.

- Female secondary school teachers perceived their principals as exhibiting significantly higher levels of transformational leadership style. Male secondary school teachers, on the other hand, perceived their principals as exhibiting greater 'transactional leadership style' and 'laissez-faire leadership style'.
- Teachers teaching in rural and urban secondary schools differed significantly in their perception related to leadership styles viz., 'transformational,' 'transactional,' and 'laissez-faire' of their principals.
- Teachers teaching in rural schools perceived their principals as more transformational in their leadership style, whereas teachers teaching in urban schools perceived greater presence of 'transactional' and 'laissez-faire' leadership styles.
- Teachers with "less than 5 years, 5–10 years, and 10 years and above" of teaching experience differed significantly in their perception of transformational leadership style.
- Teachers with 'less than 5 years' and '10 years and above' of teaching experience perceived their principals as exhibiting greater transformational leadership style, in comparison to teachers with '5–10 years of experience.'
- Teachers with 'less than 5 years,' '10 years and above' of experience did not differ significantly in their perception regarding transformational leadership style of their principals.
- Teachers with "less than 5 years, 5–10 years, and 10 years and above" of teaching experience differed significantly in their perception of transactional leadership style.
- Teachers with 'less than 5 years' and '5–10 years' reported their principals as exhibiting greater transactional leadership in comparison to teachers with '10 years and above' of experience.
- Teachers with 'less than 5 years' and '5–10 years' of teaching experience did not differ significantly in their perception regarding transactional leadership style of their principals.
- Teachers with "less than 5 years, 5–10 years, and 10 years and above" of teaching experience showed significant differences in their perception of laissez-faire leadership style.

- Teachers with ‘less than 5 years’ and ‘5–10 years’ reported greater perceived laissez-faire leadership in comparison to teachers with ‘10 years and above’ of experience.
- Teachers with ‘less than 5 years’ and ‘5–10 years’ of teaching experience did not differ significantly in their perception regarding laissez-faire leadership style of their principals.
- Teachers teaching in government and private schools differed significantly in their perception related to ‘leadership styles’ of principals viz., ‘transformational,’ ‘transactional’ and ‘laissez-faire’ leadership style.
- Teachers teaching in government schools perceived their principals as exhibiting more transformational leadership style, whereas teachers teaching in private schools perceived greater presence of ‘transactional’ and ‘laissez-faire’ leadership style.

Comparison of level of burnout with respect to gender, type of school, experience, and locality

- Male and female secondary school teachers differed significantly with respect to high and low levels of burnout.
- At the high burnout level, female teachers reported greater burnout than their male counterparts.
- At the low burnout level, male teachers reported higher burnout than their female counterparts.
- Teachers teaching in urban and rural secondary schools differed significantly with respect to high and low levels of burnout. Both at the high and low levels of burnout, urban teachers reported higher levels of burnout in comparison to their rural counterparts.
- Teachers with “less than 5 years, 5–10 years, and 10 years and above” of teaching experience did not differ significantly at high burnout level.
- Teachers with “less than 5 years, 5–10 years, and 10 years and above” of teaching experience differed significantly at low burnout level.

- Teachers with less than 5 years of experience differed significantly from those with 5–10 years and 10 years and above, reporting higher levels of low burnout.
- Teachers with 5–10 years and those with 10 years and above of experience did not differ significantly in their levels of low burnout.
- Teachers teaching in government and private schools differed significantly with respect to high and low levels of burnout.
- At the high burnout level, teachers teaching in government schools reported greater burnout in comparison to their private school counterparts. At the low burnout level, teachers teaching in private schools reported greater burnout in comparison to their government school counterparts

Comparison of frequency and forms of workplace bullying among teachers with respect to gender, type of school, experience, and locality

- A significant association between frequency of ‘workplace bullying’ and gender was found.
- Female teachers reported greater frequency of bullying, particularly in the “now and then” category, while male teachers reported greater frequency in “Only Rarely” category of workplace bullying.
- Male and female secondary school teachers differed significantly with respect to forms of workplace bullying viz., ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying.’
- Female secondary school teachers reported higher levels of ‘person-related,’ ‘work-related,’ ‘physically intimidating,’ and overall workplace bullying compared to male secondary school teachers.
- No significant association between frequency of workplace bullying and locality was found, although teachers teaching in rural schools reported higher frequencies of workplace bullying (only rarely, and now and then) compared to their urban counterparts.
- Teachers teaching in rural and urban secondary schools differed significantly with respect to forms of workplace bullying viz., ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying.’

- Teachers teaching in urban schools reported higher levels of workplace bullying, particularly in ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying’ compared to their rural counterparts.
- No significant association was found between frequency of workplace bullying and teaching experience of teachers. Teachers with 5–10 years of experience reported a higher proportion of “now and then” workplace bullying compared to other groups, while teachers with less than 5 years of experience most frequently reported experiencing bullying “only rarely.”
- Teachers with ‘less than 5 years,’ ‘5–10 years,’ and ‘10 years and above’ of experience did not differ in their experiences of physically intimidating bullying of workplace.
- Teachers with ‘less than 5 years,’ ‘5–10 years,’ and ‘10 years and above’ of teaching experience differed significantly in their experiences of person-related bullying.
- Teachers with less than 5 years and 10 years and above of experience reported the greatest exposure to person-related bullying in comparison to 5–10 years of teaching experience.
- Teachers with less than 5 years; and with 10 years did not differ in their experiences related to work related form of workplace bullying.
- A significant association between frequency of ‘workplace bullying’ and type of school was found. Teachers in private secondary schools reported a greater frequency of workplace bullying in the “now and then” category, whereas teachers in government secondary schools reported a higher frequency in the “only rarely” category.
- Teachers teaching in private schools reported higher levels of ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying’, and overall workplace bullying compared to teachers teaching in government schools.

Comparison of levels of psychological empowerment among teachers with respect to gender, type of school, experience, and locality

- Male and female secondary school teachers did not differ significantly with respect to high level of psychological empowerment.
- Male and female secondary school teachers differed significantly with respect to low level of psychological empowerment. At the low level of psychological empowerment level, female teachers reported higher empowerment than their male counterparts.
- Teachers teaching in rural and urban secondary schools did not differ significantly with respect to high and low levels of psychological empowerment.
- Both at high and low psychological empowerment, teachers teaching in rural and urban secondary schools felt equally psychologically empowered.
- Teachers with “less than 5 years, 5–10 years, and 10 years and above” of teaching experience did not differ significantly at high psychological empowerment level.
- Teachers with “less than 5 years, 5–10 years, and 10 years and above” of teaching experience did not differ significantly at low psychological empowerment level.
- At the high level of psychological empowerment, Teachers in private secondary schools reported higher psychological empowerment than their counterparts in government schools.
- At the low level of psychological empowerment, teachers teaching in government and private secondary school teachers did not differ significantly in their level of psychological empowerment.

Relationship of Correlation of Perceived Leadership Styles of Principals with Burnout among Secondary School Teachers

- Negative and significant correlation was found between ‘perceived transformational leadership style’ and ‘personal burnout,’ ‘work- related

burnout,’ ‘student-related burnout’ and ‘overall burnout.’ Teachers who perceived their principals as exhibiting greater transformational leadership style reported lower burnout.

- Positive and significant correlation was found between perceived ‘transactional’ and ‘laissez-faire’ leadership style and ‘personal burnout,’ ‘work-related burnout,’ ‘student-related burnout’ and overall ‘burnout.’ Teachers who perceived their principals as exhibiting greater transactional and laissez-faire leadership style reported higher burnout.

Relationship of Perceived Leadership Styles of Principals with Workplace Bullying among Secondary School Teachers

- Negative and significant correlation was found between ‘perceived transformational leadership style’ and “person-related, work-related, physically intimidating bullying and overall workplace bullying.” Teachers who perceived their principals as exhibiting greater transformational leadership style reported lower workplace bullying
- Positive and significant correlation was found between perceived ‘transactional’ and ‘laissez-faire’ leadership style and ‘person-related,’ ‘work-related,’ ‘physically intimidating’ bullying and overall ‘workplace bullying.’ Teachers who perceived their principals as exhibiting greater transactional and laissez-faire leadership style reported higher workplace bullying.

Relationship of Perceived Leadership Styles of Principals with Psychological Empowerment among Secondary School Teachers

- Positive and significant correlation was found between ‘perceived transformational leadership style’ and ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and overall ‘psychological empowerment,’ Teachers who perceived their principals as exhibiting transformational leadership style experienced greater meaning, competence, self-determination, and impact.

- Negative and significant correlation was found between perceived ‘transactional’ and ‘laissez-faire’ leadership style with ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and overall ‘psychological empowerment.’

Relationship of Psychological Empowerment with Workplace Bullying among Secondary School Teachers

- Negative and significant correlation was found between ‘meaning,’ ‘competence,’ ‘self-determination,’ ‘impact,’ and overall ‘psychological empowerment’ with ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying’ and overall ‘workplace bullying.’ teachers with greater meaning, competence, self-determination, impact, and overall psychological empowerment experienced less ‘person-related,’ ‘physically intimidating’ bullying and overall ‘workplace bullying.’
- Negative and significant correlation was found between meaning and work-related bullying. Teachers with greater meaning experienced less ‘work-related bullying.’

Relationship of Workplace Bullying with Burnout among Secondary School Teachers

- Positive and significant correlation was found between ‘person-related,’ ‘work-related,’ ‘physically intimidating bullying’ and overall workplace bullying with ‘personal burnout,’ ‘work-related burnout,’ ‘student-related burnout’ and overall burnout. Teachers experiencing greater workplace bullying (overall) reported higher ‘personal burnout,’ ‘work-related burnout,’ ‘student-related burnout’ and overall burnout.
- Positive and significant correlation was found between ‘workplace bullying (overall)’ and ‘personal burnout,’ ‘work-related burnout,’ and ‘student-related burnout.’
- Positive and significant correlation was found between ‘person-related,’ ‘work-related,’ and ‘physically intimidating bullying’ and ‘personal burnout,’ ‘work-

related burnout,’ and ‘student-related burnout,’ suggesting that different forms of bullying collectively contributed to teacher burnout.

Mediating role of workplace bullying on the relationship between perceived leadership styles of principals (transformational, transactional, and laissez-faire) and burnout.

- The indirect effect, that is, perceived transformational leadership style → workplace bullying → burnout (path $a*b$), as well as the direct effect, perceived transformational leadership style → burnout (path c'), were both found to be significant.
- The indirect effect, that is, perceived transactional leadership style → workplace bullying → burnout (path $a*b$), as well as the direct effect, perceived transactional leadership style → burnout (path c'), were both found to be significant.
- The indirect effect, that is, perceived laissez-faire leadership style → workplace bullying → burnout (path $a*b$), as well as the direct effect, perceived laissez-faire leadership style → burnout (path c'), were both found to be significant.
- Workplace bullying partially mediated the relationship between “perceived transformational, transactional, and laissez-faire leadership style” and ‘burnout.’ The influence on burnout was exerted both directly by “perceived transformational, transactional, and laissez-faire leadership style” of principals and indirectly through ‘workplace bullying.’

Role of psychological empowerment in the direct and indirect relationship between perceived leadership styles (transformational, transactional, and laissez-faire) and burnout via workplace bullying

- The interaction effect of perceived transformational leadership style × psychological empowerment on burnout was not significant. While both variables individually contributed to reducing burnout, their interaction did not significantly influence burnout levels. ‘Psychological empowerment’ did not moderate the relationship between ‘perceived transformational leadership style’ and ‘burnout.’

- The interaction effect of perceived transactional leadership style $\times$ psychological empowerment on burnout was significant. At low and mean level of psychological empowerment, perceived transactional leadership style increased burnout. At high levels of psychological empowerment, the adverse impact of transactional leadership style on burnout reduced. 'Psychological empowerment' moderated the relationship between perceived transactional leadership style and burnout.
- The interaction effect of perceived laissez-faire leadership style $\times$ psychological empowerment on burnout was also significant. At low and mean level psychological empowerment, burnout was higher under laissez-faire leadership. At high levels of psychological empowerment, the adverse impact of laissez-faire leadership on burnout reduced. 'Psychological empowerment' moderated the relationship between 'perceived laissez-faire leadership style' and 'burnout.'
- The indirect effect of perceived transformational leadership style $\rightarrow$ workplace bullying $\rightarrow$ burnout was significant. However, psychological empowerment did not moderate this mediation. That is, while transformational leadership style reduced workplace bullying and thus lowered burnout, the strength of this indirect relationship remained unchanged across different levels of 'psychological empowerment.'
- The indirect effect of perceived transactional leadership style $\rightarrow$ workplace bullying $\rightarrow$ burnout was significantly moderated by psychological empowerment. At low and mean level psychological empowerment, transactional leadership style strongly increased bullying, which led to greater burnout. At high level of psychological empowerment, the adverse effect of transactional leadership style reduced, subsequently reducing burnout via reduction in 'workplace bullying.'
- The indirect effect of perceived laissez-faire leadership style $\rightarrow$ workplace bullying $\rightarrow$ burnout was significantly moderated by psychological empowerment. At low and mean level psychological empowerment, laissez-faire leadership style strongly increased bullying, which led to greater burnout. At high level of psychological empowerment, the adverse effect of leadership

style reduced, subsequently reducing burnout via reduction in ‘workplace bullying.’

- Psychological empowerment did not moderate the direct effect of perceived transformational leadership style with burnout neither moderated the indirect effect of perceived transformational leadership style on burnout through mediating role of workplace bullying. ‘Transformational leadership style’ and ‘psychological empowerment’ individually reduced ‘burnout.’
- In contrast, ‘psychological empowerment’ significantly moderated the direct effect of ‘transactional’ and ‘laissez-faire’ leadership styles with ‘burnout,’ as well as moderated the indirect effect of perceived ‘transactional’ and ‘laissez-faire’ leadership styles on ‘burnout’ through mediating role of ‘workplace bullying.’ Psychological empowerment reduced the negative impact of poor leadership styles and workplace bullying, indicating that higher psychological empowerment buffered the adverse effects of ‘ineffective leadership’ and ‘workplace bullying’ on ‘burnout.’

5.3 Implications and Recommendations

The first objective of the study was “to explore the leadership styles of principals as perceived by secondary school teachers.”

- Majority of teachers perceived their principals as exhibiting ‘transformational leadership style,’ characterised by inspiring and motivating teachers to achieve their highest potential. School authorities should capitalise on this strength by promoting policies and practices that reinforce transformational leadership style traits among principals. This can include professional development programmes focusing on effective communication, vision setting, and emotional intelligence to enhance the ability of principals to inspire and guide their staff.
- On the other hand, a small percentage of teachers perceived their principals as exhibiting ‘transactional leadership style,’ which focuses on task management, structured rewards, and compliance, or ‘laissez-faire leadership style,’ marked by passive, hands-off management with minimal guidance and involvement. To address this, schools should provide targeted training and

mentorship opportunities for principals who rely predominantly on 'transactional leadership style.' While transactional leadership style has its place, such as in managing tasks and ensuring compliance, it should be balanced with transformational elements to achieve a more holistic approach. Moreover, principals exhibiting laissez-faire style should receive specific interventions to enhance their active engagement and decision-making skills. This may include leadership coaching sessions and workshops on accountability and proactive school management.

- Encouraging principals to foster a culture of collaboration and innovation will help sustain a positive and productive school environment that supports teacher effectiveness and subsequently student achievements. Schools should provide targeted training and mentorship programmes to help principals develop a more balanced leadership style.
- Further leadership development programmes incorporating modules on emotional intelligence, communication, and adaptive leadership styles may enhance principals' ability to foster stronger relationships with their staff and adapt to their diverse needs.
- To refine and strengthen leadership effectiveness further, school systems should implement feedback mechanisms involving teachers, parents, and other stakeholders. Feedback can illuminate areas for improvement and highlight strengths that contribute to a positive school climate.
- Additionally, collaborative forums where principals and teachers can discuss challenges, share best practices, and co-create solutions can be invaluable. Ultimately, empowering school principals to adopt a balanced and inclusive leadership style may contribute significantly to teacher morale, effectiveness, and overall school performance.

The second objective of the study was, “to explore the levels of burnout and psychological empowerment among secondary school teachers.”

- Student-related burnout appeared generally low among teachers; however, a noticeable proportion still reported moderate levels, suggesting that certain

school or classroom factors continue to contribute to student-related stress. Schools should explore ways to enhance student-teacher interactions and provide support mechanisms to address these concerns. This can include strategies such as student behaviour management training, teacher-student mentoring programmes, and structured emotional support systems to help teachers navigate classroom challenges.

- Enhancing teacher-student relationships through professional development can mitigate student-related burnout. Training programmes focusing on effective classroom management, conflict resolution, and emotional intelligence will equip teachers with strategies to handle student-related stressors more effectively.
- In the current study many teachers managed personal burnout effectively, a significant portion still faced challenges in maintaining personal well-being, with a considerable number experiencing moderate to high levels of personal burnout. Schools should prioritise teacher wellness initiatives that promote self-care strategies, mental health awareness, and work-life balance to help teachers manage stress more effectively.
- Work-related burnout presented a more concerning trend, as a substantial proportion of teachers reported high burnout levels, surpassing those experiencing low or moderate burnout. This highlighted the need to address occupational stressors such as workload, administrative demands, and leadership practices to improve teacher well-being. Schools should implement policies that ensure fair workload distribution, provide additional administrative support, and create a supportive work environment that minimizes excessive pressure. Professional development on time management and coping strategies can also help teachers manage job-related stress more effectively.
- In terms of overall burnout, while majority of teachers exhibited low levels, a significant number reported moderate or high burnout. This underscores the need for continuous interventions to reduce burnout risks, sustain teacher motivation, and enhance overall effectiveness. Schools should establish structured burnout monitoring mechanisms, allowing early detection and timely

intervention. Additionally, fostering a collaborative and supportive work culture can help teachers manage stress and maintain job satisfaction.

- Promoting the implementation of structured well-being programmes within schools is essential as that can help teachers develop resilience and manage personal stress effectively. Initiatives such as wellness workshops, mental health counselling, and peer support groups should be introduced to support teachers' emotional and psychological well-being.
- To strengthen burnout prevention strategies further, school systems should implement feedback mechanisms involving teachers, administrators, and stakeholders to assess burnout levels and identify areas requiring intervention. Regular surveys and open discussions can provide valuable insights for improving teacher well-being.
- Additionally, collaborative peer forums where teachers can discuss challenges, share best practices, and co-develop solutions may serve as a valuable support system. Schools should create platforms that encourage shared learning and mentorship, promoting an organisational environment that places well-being at the forefront.
- Encouraging school administrators to adopt a transformational leadership approach through targeted training can help create an environment that promotes collaboration, confidence, and professional growth among teachers. At the same time, reducing excessive administrative tasks through efficient processes and sufficient institutional support can substantially alleviate burnout by improving teacher well-being, job satisfaction, and instructional effectiveness.
- In the current study, for meaning dimension of psychological empowerment, majority of teachers struggled to find meaning in their work, which reduced their motivation, engagement, and long-term job satisfaction.
- Similarly for impact dimension, a majority of teachers felt that their impact on the school and students was minimal, leading to disengagement and lower commitment to their roles.

- While for competence dimension, most of the teachers expressed moderate to high competence, while some teachers lacked confidence in their professional abilities, which increased workplace stress and affected performance.
- Further, a considerable number of teachers experienced low self-determination, indicating limited autonomy in decision-making, which contributed to frustration and reduced innovation. Overall, a large portion of teachers felt low psychological empowerment, reinforcing the importance of implementing specific strategies to strengthen their autonomy, competence, and sense of purpose in their professional roles.
- Enhancing teachers' sense of meaning can be achieved through recognition and appreciation programs that celebrate their contributions, as well as opportunities for involvement in meaningful school initiatives and professional growth that connect their work with long-term student success. Improving teachers' perceived impact requires the promotion of participatory decision-making, allowing them to contribute to curriculum development, school policies, and instructional strategies, cultivating a stronger sense of involvement and influence in their roles.
- Strengthening competence and confidence can be facilitated through continuous professional development, mentorship programmes, and peer coaching, ensuring that teachers are equipped with the necessary skills to perform effectively. Increasing self-determination involves granting teachers greater autonomy in instructional methods, classroom management, and curriculum adaptation, while reducing micromanagement and rigid administrative oversight, which can otherwise limit creativity and job satisfaction.
- Fostering a culture of psychological empowerment within schools requires equipping school leaders with the skills to implement supportive leadership practices, offer constructive feedback, and engage teachers actively in the development of school policies. Additionally, encouraging peer collaboration through professional learning communities, teacher networks, and shared learning platforms can strengthen professional support by facilitating the exchange of knowledge and the sharing of experiences among teachers.

- Implementing empowerment workshops that emphasise resilience, self-efficacy, and proactive decision-making can help teachers develop the skills and mindset needed to handle workplace challenges with confidence. Strengthening psychological empowerment within schools can lead to a more engaged, motivated, and adaptable teaching staff, thereby enhancing job satisfaction, reducing burnout, and improving overall effectiveness in the educational setting.

The third objective of the study was, “to find out the frequency and forms of workplace bullying among secondary school teachers.”

- Majority teachers reported no experiences of person-related bullying in the recent past; however, a considerable portion experienced it occasionally, indicating that bullying remains a concern in school environments. Person-related bullying was not widespread, though some teachers reported occasional incidents that may affect well-being and morale.
- Work-related bullying emerged as a more significant issue, with many teachers experiencing it occasionally or severely, suggesting the need to address workplace culture, administrative demands, and peer relations to prevent stress and reduced productivity.
- Physically intimidating bullying was less common but still reported at moderate levels, reflecting instances of coercion or aggressive behaviour that could impact psychological safety.
- In terms of overall workplace bullying, a little over half of the teachers reported no such experiences, while a substantial portion experienced bullying occasionally. Although only a small fraction faced severe bullying, the presence of even occasional exposure highlights the need for preventive measures, supportive leadership, and clear anti-bullying policies to foster a respectful and secure work environment for all teachers.
- Overall, while severe and frequent bullying was not prevalent, the presence of occasional and diverse forms of bullying underscoring the need to cultivate a school environment that is supportive and respectful.

- Schools should implement anti-bullying policies and awareness programmes that emphasise respectful and professional workplace interactions. Establishing clear reporting mechanisms and ensuring that teachers feel safe in expressing concerns can help mitigate personal and work-related bullying.
- To reduce work-related bullying, school administrations should promote fair workload distribution, enhance communication between staff and leadership, and provide conflict resolution training. Creating a collaborative and inclusive school culture can help minimize power imbalances and prevent negative workplace behaviours.
- Addressing physically intimidating bullying requires strict enforcement of professional conduct policies, complemented by adherence to the Prevention of Sexual Harassment (POSH) Act, 2013 wherever gender-based intimidation or inappropriate behaviour is involved. Regular training on de-escalation techniques, conflict management, and gender sensitivity should be organised. Encouraging open dialogue and providing teachers with accessible reporting mechanisms and support systems can enhance their confidence in addressing and reporting such incidents.
- Establishing peer support groups, professional counselling services, and leadership training can further contribute to a positive work environment. Schools should prioritize teacher well-being initiatives, ensuring that all teachers feel valued, respected, and safe in their professional roles.

The fourth objective of the study was, “to compare the perceived leadership styles of principals, level of burnout, frequency and forms of workplace bullying, and levels of psychological empowerment among teachers with respect to gender, type of school, experience and locality.”

- In the present study, female teachers perceived transformational leadership style more favourably, suggesting that female teachers were more responsive to leadership styles that emphasised motivation, vision, collaboration, and professional growth. This could reflect their greater sensitivity to relational and supportive leadership practices, which contributed to increased engagement and

job satisfaction. In contrast, male teachers perceived transactional and laissez-faire leadership styles as more prevalent, indicating a higher perception of task-oriented or passive leadership approaches in their school environments. This difference pointed toward potential gender-based variations in leadership style perception, which may influence how male and female teachers engage with their roles and how supported they feel professionally.

- These findings underscore the significance of developing leadership approaches that are sensitive to gender dynamics, emphasising the need for school leaders to tailor their leadership styles to accommodate the varied needs of their staff members. Special focus should be placed on helping male teachers feel more included and supported through collaborative decision-making, regular communication, and leadership engagement practices. Simultaneously, the contributions and preferences of female teachers should be acknowledged and reinforced to promote sustained motivation and growth.
- Teachers teaching in rural schools reported transformational leadership style as the dominant leadership style in their schools, suggesting the presence of more supportive and visionary school administrators. Conversely, teachers teaching in urban schools reported greater transactional and laissez-faire leadership style, reflecting a more performance-focused, rigid, or disengaged administrative style. The relatively higher presence of laissez-faire leadership style in urban schools may be attributed to administrative overload, lack of accountability, or resource constraints, which can hinder principal engagement and teacher development.
- This geographic disparity highlights the need for equitable and context-sensitive leadership training. In urban schools, training programmes should aim to reduce passive leadership behaviours, enhance administrator involvement, and promote active support for teachers. In schools in rural areas, leadership development should continue to build on existing transformational practices while integrating structured and goal-oriented strategies to improve school performance and staff development.
- Teachers with 'less than 5 years' of experience perceived transformational leadership style to a greater extent, indicating that teachers in the early stages of

their careers may enter the profession with optimism and a stronger sense of trust in school leadership. Teachers with 10 years and above of experience also reported similarly greater perceptions, suggesting that over time, experienced teachers may re-establish confidence in leadership based on accumulated experience or professional stability. In contrast, teachers with '5–10 years' of experience reported significantly lower perceptions of transformational leadership, which may reflect a period of disillusionment or unmet professional expectations.

- Similarly, perceptions of transactional and laissez-faire leadership styles also varied across experience groups. Teachers with 'less than 5 years' and '5–10 years' reported greater perceptions of both styles, while teachers with 10 years and above perceived these leadership styles less strongly. This trend suggests that more experienced teachers may be less responsive to leadership that is overly directive or passive, possibly due to increased autonomy, self-efficacy, or reduced dependency on external leadership behaviours for guidance and motivation.
- These trends implied that mid-career teachers need renewed engagement. To address declining perceptions, schools should introduce mentorship programmes, professional development pathways, and inclusive decision-making opportunities that actively involve experienced teachers. Recognizing their contributions and offering them leadership roles in school initiatives may help maintain their motivation and sense of belonging.
- Teachers teaching in government schools perceived transformational leadership style as more prevalent, which may reflect the presence of experienced administrators, stable policies, and a focus on long-term educational goals. In contrast, teachers teaching in private schools experienced higher levels of transactional and laissez-faire leadership style, possibly due to the emphasis on performance metrics, administrative pressure, job insecurity, and limited autonomy. These contrasting environments highlight the need for structured leadership reform in private schools, where leadership often defaults to performance management rather than professional support.

- To bridge this gap, private school principals should be trained in transformational leadership style and encouraged to develop collaborative and supportive school cultures. Additionally, policy-level interventions are needed to address job security, fair compensation, and resource allocation in private schools, which may indirectly influence leadership behaviour and teacher morale.
- Promoting balanced and inclusive leadership development involves investing in training that emphasises vision-setting, emotional intelligence, and staff development for all school administrators. Such training should ensure that teachers, regardless of gender, school type, or experience level, feel valued, heard, and supported in their professional journey.
- Strengthening feedback mechanisms is also essential. Regular leadership assessments and teacher feedback surveys should be implemented to identify leadership strengths and areas for improvement. By encouraging teachers to share their perceptions of administrative effectiveness and school climate, school systems can promote a more transparent, responsive, and adaptive leadership culture.
- Addressing gender, experience, and geographic disparities in leadership perceptions requires a multi-pronged approach involving leadership training, policy reform, teacher engagement, and organisational support. Schools that invest in supportive and inclusive leadership practices are more likely to foster positive school climates, reduce ‘teacher burnout,’ and enhance professional satisfaction and effectiveness across the teaching workforce.
- Among teachers experiencing high burnout, females reported greater intensity of symptoms compared to their male counterparts. In contrast, within the low burnout group, male teachers reported higher levels of stress and exhaustion than female teachers. These patterns suggested that while burnout is a shared experience, its severity may manifest differently across genders depending on the level of burnout.
- Teachers teaching in urban schools reported higher levels of ‘burnout’ than their rural counterparts across both high and low burnout categories. This pattern highlighted the increased stress and workload pressures often associated with

urban school environments. These findings underscored the need to address factors such as workload distribution and administrative support for teachers teaching in urban schools to help reduce teacher burnout.

- Teaching experience was found to significantly influence low burnout levels, though not high burnout levels, among secondary school teachers. Teachers with ‘less than 5 years’ of experience exhibited comparatively higher burnout even within the low-burnout category, suggesting that early-career teachers may struggle more with adapting to professional expectations, workload, and classroom management responsibilities. In contrast, teachers with ‘5-10 years’ of experience recorded the lowest burnout levels, reflecting a stage of professional consolidation, confidence, and effective coping. Teachers with ‘10 years and above’ of experience showed a slight rise in burnout compared to the mid-career group, but the difference was not statistically significant, indicating that while prolonged service may reintroduce certain stressors or fatigue, it does not substantially elevate burnout beyond moderate levels.
- Teachers in government schools were found to experience greater burnout at the high level, which may be attributed to bureaucratic pressures, rigid administrative structures, and limited flexibility in work conditions. Conversely, teachers in private schools reported higher burnout at the low level, likely due to job insecurity, demanding performance expectations, and inadequate support systems.
- Efforts to reduce burnout among teachers in urban, government, and private schools should be context-specific. For urban schools, focus should be on workload management, administrative support, and well-being initiatives to address environmental stressors. For government schools, reducing bureaucratic workload, enhancing autonomy, and providing stress-management programs are essential to counter high-level burnout. For private schools, ensuring job security, setting realistic performance expectations, and strengthening support systems can help mitigate early burnout. Across all settings, access to mental health resources, flexible scheduling, and professional development opportunities can further promote teacher well-being.

- To support novice teachers, schools should implement mentorship programmes, induction training, and peer support networks to help them develop coping strategies and resilience. Experienced teachers should be given opportunities for career growth, leadership roles, and professional renewal programmes to sustain motivation and engagement.
- Private schools should enhance teacher support by improving job security, offering fair compensation, and reducing excessive workload demands. Encouraging collaborative leadership, recognition programmes, and teacher involvement in decision-making can help reduce burnout and improve overall job satisfaction. Government schools should focus on reducing bureaucratic pressures, providing greater autonomy, and implementing stress-management programmes to address high burnout levels.
- The higher frequency of bullying reported by female teachers suggests the need for gender-sensitive anti-bullying interventions within schools. School leadership should implement targeted policies, training, and support systems that address the unique vulnerabilities faced by female teachers, including establishing confidential reporting mechanisms, providing counselling services, and promoting a zero-tolerance stance on gender-based harassment to ensure a safer and more equitable work environment.
- Female secondary school teachers reported higher levels of person-related, work-related, physically intimidating, and overall workplace bullying compared to male secondary school teachers, indicating potential gender-based imbalances in school environments.
- Given the higher levels of workplace bullying reported by female teachers, schools should prioritize gender-responsive interventions, such as establishing safe reporting mechanisms, conducting regular gender-sensitivity training for staff and administrators, and creating mentorship and peer support networks for female teachers to reduce vulnerability and enhance professional well-being.
- Teachers teaching in urban secondary schools reported higher levels of workplace bullying, particularly in person-related and work-related dimensions. However, while teachers teaching in rural schools reported higher frequencies

of occasional bullying, the difference in bullying frequency between teachers teaching in urban and rural schools was not statistically significant.

- Teaching experience played a significant role in shaping teachers' experiences of 'workplace bullying,' particularly in relation to person-related, work-related, and overall workplace bullying. Teachers with 'less than 5 years' and those with '10 years and above' of experience reported comparably high levels of person-related and work-related bullying, indicating that both novice and highly experienced teachers may be more susceptible to interpersonal mistreatment and task-related pressures. This suggests that teachers at the beginning of their careers may be particularly vulnerable due to limited authority or lack of familiarity with institutional dynamics, while teachers with longer service may encounter resistance, role-based conflicts, or professional fatigue. In contrast, teachers with '5–10 years' of experience reported the lowest exposure to both 'person-related' and 'work-related bullying,' reflecting a more stable and professionally adaptive phase.
- These findings reinforce the need for targeted interventions aimed at supporting teachers at both ends of the experience spectrum. In the case of work-related and physically intimidating bullying, no significant differences were observed across experience groups, indicating that these forms of bullying were experienced similarly by all teachers, regardless of their years of service.
- While teachers with '5–10 years' and 'less than 5 years' of experience respectively reported higher frequencies of bullying compared to the other groups, the overall differences in bullying frequency across experience groups were not statistically significant.
- Teachers teaching in private schools experienced significantly higher levels of 'workplace bullying' across all dimensions compared to teachers teaching in government schools. This may be attributed to factors such as job insecurity, hierarchical pressure, and institutional policies commonly present in private schools. The lack of structured grievance redressal mechanisms and heightened performance expectations may further contribute to increased mistreatment in these settings. Moreover, teachers in private schools were more likely to experience 'workplace bullying' "now and then," whereas those in government

schools predominantly reported such incidents as occurring “only rarely,” highlighting distinct patterns in the frequency of bullying across school types and reinforcing the need to address systemic issues within educational institutions.

- Addressing workplace bullying among female teachers requires gender-sensitive policies, stronger reporting mechanisms, and leadership training to promote a safer and more inclusive school environment. Schools should implement strict anti-bullying policies and awareness programs to challenge gender biases and create a culture of mutual respect.
- Urban schools should focus on enhancing workplace relations, reducing excessive competition, and fostering collaborative environments to mitigate bullying. School administrations should establish conflict resolution training, peer support groups, and mental health resources to help teachers cope with workplace stress and bullying.
- School leadership in urban areas should implement proactive anti-bullying policies, clear reporting mechanisms, and leadership accountability frameworks to ensure a zero-tolerance stance toward workplace bullying, fostering a psychologically safe work environment for teachers.
- Support systems for novice teachers should be prioritized, including mentorship programs, structured induction processes, and leadership involvement to prevent bullying and provide guidance. Schools should also introduce regular workplace behaviour assessments and anonymous reporting systems to identify and address bullying incidents early.
- Private schools should implement stronger workplace protections, formal grievance redressal mechanisms, and policies that ensure fair treatment of teachers. Encouraging Transformational leadership style practices, transparent evaluation systems, and professional development opportunities can reduce bullying incidents and create a healthier work culture.
- Female and male teachers reported similar psychological empowerment at high psychological empowerment level, indicating no significant gender difference. However, at the low empowerment level, female teachers reported higher empowerment than their male counterparts.

- School leadership and policymakers should design interventions aimed at supporting male teachers who experience lower psychological empowerment at the low level, such as mentoring programs, leadership opportunities, and professional recognition to build their sense of impact, competence, and autonomy.
- Teachers teaching in urban schools reported greater psychological empowerment than their rural counterparts at high psychological empowerment level, although the difference was relatively small. The difference may be influenced by better access to professional development, stronger institutional support, and more opportunities for career advancement in urban settings. At low empowerment level, both groups reported similar levels of psychological empowerment, suggesting that contextual advantages in urban settings may have a more pronounced impact when overall psychological empowerment is higher.
- Teachers with ‘less than 5 years’, ‘5-10 years,’ and ‘10 years and above’ of teaching experience did not differ significantly in either high or low levels of psychological empowerment. Although minor variations in mean scores were observed, these were not statistically meaningful, suggesting that years of experience exert minimal influence on teachers’ sense of empowerment. This implies that psychological empowerment among teachers may depend more on organisational climate, leadership practices, or individual dispositions than on tenure alone.
- A significant difference in psychological empowerment was observed between teachers teaching in government and private secondary schools at the high level of psychological empowerment, with private school teachers reporting higher empowerment than their government school counterparts. However, no significant difference was found at the low level of psychological empowerment. These findings suggest that, although school type may influence psychological empowerment at higher levels, factors such as professional competence, leadership styles, and organisational culture may play a more substantial role in shaping teachers’ sense of psychological empowerment.

- Schools should focus on ensuring equal professional development opportunities for both male and female teachers, fostering an inclusive work environment that supports continuous learning, career advancement, and leadership roles for all educators. Encouraging mentorship programmes, skill-building workshops, and recognition initiatives can further enhance psychological empowerment, particularly among male teachers.
- To bridge the gap in psychological empowerment of teachers teaching in urban and rural schools, rural schools should implement targeted professional development programmes, leadership training, and mentorship initiatives to strengthen teachers' confidence, autonomy, and decision-making capabilities. Improving access to educational resources, technology, and career growth opportunities in rural areas can help reduce disparities in empowerment levels.
- Supporting early-career teachers through structured training programmes, peer mentoring, and leadership exposure can help increase their sense of meaning, competence, and self-determination. Schools should create a progressive career development framework that ensures teachers feel empowered from the start of their careers and experience steady growth throughout their professional journey.
- Since the type of school shows no significant difference in teachers' psychological empowerment at the higher level, improvement efforts should concentrate on intrinsic and school-wide factors such as effective leadership, a positive institutional culture, and opportunities for professional growth. Special attention should be given to teachers with lower levels of empowerment, where government school teachers have reported comparatively higher empowerment than those in private schools. Schools, irrespective of their type, should work towards creating a collaborative and supportive environment that nurtures teachers' sense of value, autonomy, and motivation in their professional roles.

The fifth objective of the study was “to find out the relationship of perceived leadership styles of principals (transformational, transactional and laissez-faire) with burnout, workplace bullying, and psychological empowerment among secondary school teachers.”

- A negative and significant correlation was found in perceived transformational leadership style with burnout, indicating that teachers who perceived their principals as exhibiting transformational leadership style reported lower levels of burnout. This highlights the value of supportive, visionary, and motivational leadership in promoting teacher well-being and reducing stress. Leaders who exhibit empathy, foster collaboration, and inspire with a shared vision can help prevent emotional exhaustion and maintain morale. To cultivate such environments, school administrators should be trained in transformational leadership style practices, with a focus on effective communication, emotional intelligence, teacher motivation, and stress management. These approaches can empower teachers, enhance engagement, and sustain professional enthusiasm.
- In contrast, positive and significant correlation was found in perceived 'transactional' and 'laissez-faire' leadership styles with burnout. Individually task-focused and passive leadership approaches were associated with increased teacher stress, emotional exhaustion, and professional dissatisfaction. Transactional leadership style, with its emphasis on compliance and performance, may heighten pressure, while laissez-faire leadership style—marked by disengagement—can lead to confusion and lack of support. To mitigate these effects, leadership development programmes should promote a balanced approach that combines accountability with emotional and professional support. Additionally, schools should implement workplace well-being initiatives such as stress management workshops, mindfulness training, and peer support groups, mental health support, and teacher recognition programmes like monthly appreciation awards, best teacher of the term accolades, and public acknowledgment during school assemblies to help reduce the burnout associated with less supportive leadership styles.
- A negative and significant correlation was found in perceived transformational leadership style with workplace bullying, indicating that effective leadership helps reduce bullying incidents in schools. Principals who are engaged, supportive, and proactive create a respectful and inclusive school environment that discourages negative behaviours among staff. Transformational leaders set clear expectations, promote collaboration, and maintain a positive

organisational culture where bullying is less likely to occur. In contrast, transactional leadership style may indirectly contribute to workplace conflict due to its rigid, performance-driven structure, which can increase pressure and tension among teachers. Laissez-faire leadership style showed the strongest positive correlation with workplace bullying, suggesting that passive and disengaged leadership allows toxic behaviours to persist without intervention.

- These findings highlighted the need for school leaders to adopt transformational leadership style. Leadership training programmes should focus on conflict resolution, effective communication, and monitoring of workplace relations, alongside the implementation of anti-bullying policies. Schools should also establish formal grievance redressal systems and promote a culture of peer support, accountability, and mutual respect. By fostering a safe and supportive organisational climate, schools can reduce bullying, enhance staff morale, and improve overall teacher well-being.
- A positive and significant correlation was found in perceived transformational leadership style with psychological empowerment, indicating that teachers who perceived their principals as exhibiting transformational leadership style felt more competent, autonomous, and impactful in their professional roles. Transformational leaders foster motivation, provide opportunities for professional growth, and instil a shared sense of purpose, all of which contribute to enhanced teacher engagement and empowerment. In contrast, transactional leadership style showed a weak but significant negative correlation with psychological empowerment, suggesting that leadership based primarily on rewards and performance expectations may not effectively promote teachers' intrinsic motivation, autonomy, or sense of meaningful contribution.
- The results highlight the need to embrace 'transformational leadership style' that promotes teacher autonomy, collaboration, and continuous development. School leadership programmes should emphasise mentorship, inclusive decision-making, and empowerment strategies that enable teachers to take initiative and feel ownership in their roles. Furthermore, schools should implement structured empowerment initiatives, such as self-development workshops, leadership roles, and teacher-led innovation programmes, to ensure

that educators feel recognised, supported, and motivated in their professional journey.

The sixth objective of the study was “to find out the relationship of psychological empowerment with workplace bullying among secondary school teachers.”

- A negative and significant correlation was found between psychological empowerment and workplace bullying, indicating that teachers who felt more psychologically empowered experienced lower levels of bullying across all dimensions. Teachers with a strong sense of “meaning, competence, self-determination, and impact” appeared better equipped to handle workplace challenges and were less susceptible to mistreatment. Among the different forms, person-related bullying showed the strongest negative correlation. This suggested that empowered teachers were less likely to face interpersonal mistreatment such as exclusion, verbal harassment, or undermining behaviours. Similarly, ‘work-related’ and ‘physically intimidating’ forms of bullying were also negatively correlated with psychological empowerment, reinforcing the view that empowered teachers encounter fewer job-related stressors and coercive behaviours in the workplace.
- These findings highlighted the importance of enhancing psychological empowerment among teachers as a strategy to reduce workplace bullying. School leaders should provide professional development opportunities, promote teacher autonomy, and cultivate a positive and respectful school climate. Encouraging open communication, participatory decision-making, and peer support networks can further minimize bullying incidents. Additionally, schools should adopt clear anti-bullying policies and implement leadership training programmes focused on building a supportive and empowering environment. By fostering psychological empowerment, schools can create a safer, more inclusive workplace that enhance teacher well-being and job satisfaction.

The seventh objective of the study was “to find out the relationship between workplace bullying and burnout among secondary school teachers.”

- A positive and significant correlation between ‘workplace bullying’ and ‘burnout’ indicated that teachers who experienced greater bullying were more likely to report greater burnout. Workplace bullying was significantly correlated with all dimensions of burnout, suggested that repeated exposure to negative behaviours contributed to increased psychological strain and workplace stress. ‘Person-related,’ ‘work-related,’ and ‘physically intimidating bullying’ each showed strong correlations with burnout, reinforcing that various forms of bullying collectively create a hostile and unsupportive environment that can lead to ‘emotional exhaustion,’ ‘reduced personal accomplishment,’ and ‘disengagement’ among teachers.
- These findings emphasised the need for robust anti-bullying measures in schools to prevent teacher burnout. Schools should establish clear reporting systems, implement workplace conflict resolution programmes, and offer leadership training focused on promoting respect and inclusion. Administrators must foster a supportive organisational climate where teachers feel safe, valued, and protected from mistreatment. Additionally, stress management initiatives, mental health support services, and professional counselling should be made accessible to teachers affected by bullying. By proactively addressing workplace bullying, schools can foster a more positive and supportive work environment that helps reduce burnout while enhancing teacher morale and job satisfaction.

The eighth objective of the study was “to investigate the mediating role of workplace bullying on the relationship between perceived leadership styles of principals (transformational, transactional and laissez-faire) and burnout.”

- In the present study, ‘workplace bullying’ partially mediated the relationship between ‘perceived leadership styles’ and ‘burnout’ among teachers. Specifically, ‘transformational leadership style’ was found to reduce burnout both directly and indirectly, by lowering workplace bullying. However, the presence of workplace bullying even under transformational leadership style

suggested that its protective effect may not be fully realised unless negative workplace behaviours are also directly addressed. This highlights the importance of creating not only inspiring leadership but also a supportive and safe school environment.

- Workplace bullying also partially mediated the relationship between ‘transactional’ and ‘laissez-faire’ leadership styles and ‘burnout’ among teachers, and indicated that these leadership styles contributed to burnout both directly and indirectly through increased exposure to workplace bullying. Transactional leadership style, with its rigid, performance-driven focus, may inadvertently foster high-pressure environments that increase vulnerability to ‘workplace bullying.’ On the other hand, the ‘laissez-faire leadership style,’ marked by passivity and minimal intervention, can foster toxic workplace environments where bullying remains unaddressed, thereby exacerbating teacher stress and burnout.
- These findings underscored the significance of developing targeted initiatives aimed at enhancing leadership practices and preventing bullying within school environments. Leadership training programmes should promote proactive, supportive, and communicative leadership styles. Transformational leadership style training should emphasise fostering positive school climates, encouraging open communication, and actively resolving conflicts.
- Transactional leadership style development should focus on balancing performance expectations with emotional and professional support for teachers to reduce pressure and mitigate workplace bullying risks.
- Schools exhibiting laissez-faire leadership style should be addressed through policy reforms that reduce passivity by promoting active principal engagement, transparent decision-making, and effective conflict resolution mechanisms, thereby discouraging neglect and non-intervention.
- In addition, schools must strengthen anti-bullying initiatives, establish effective grievance redressal systems, and provide teacher support programmes aimed at fostering psychological safety. Teachers should feel empowered to report workplace bullying incidents without fear of retaliation, and policies must be in place to ensure swift, confidential, and fair responses.

- Preventive efforts such as peer support groups, collaborative problem-solving sessions, and wellness programmes can help create a culture of mutual respect and empathy. These approaches not only reduce the incidence of workplace bullying but also promote emotional resilience, reduce burnout, and enhance overall teacher well-being.
- By addressing both leadership practices and workplace bullying, schools can cultivate a healthier, more empowering work environment that supports teacher retention, professional growth, and student success.

The ninth objective of the study was “to investigate whether psychological empowerment would moderate the direct and indirect relationship between perceived leadership styles (transformational, transactional and laissez-faire) and burnout via workplace bullying.”

- No significant direct effect of psychological empowerment with perceived transformational leadership style and burnout was found, which indicated that while both variables independently contributed to reducing burnout, their interaction did not enhance this effect. This suggested that perceived transformational leadership style alone played a more direct role in lowering teacher burnout, regardless of the level of psychological empowerment. An empowering environment remains important, but it does not amplify the impact of ‘transformational leadership style’ on ‘burnout.’
- In contrast, psychological empowerment significantly moderated the relationship between both the perceived leadership styles- ‘transactional’ and ‘laissez-faire’ and ‘burnout.’ Teachers with low psychological empowerment were more vulnerable to ‘burnout’ under ‘transactional leadership style,’ but as ‘psychological empowerment’ increased, the negative effects of this leadership style weakened and eventually diminished. A similar pattern was observed with ‘laissez-faire leadership style,’ where higher levels of psychological empowerment acted as a protective factor, reducing the burnout typically associated with passive and disengaged leadership. These findings suggest that psychologically empowered teachers are more resilient to the adverse effects of rigid and non-interventionist leadership styles.

- Furthermore, workplace bullying partially mediated the relationship between ‘perceived transformational leadership style’ and ‘burnout,’ and indicated that ‘transformational leadership style’ reduced workplace bullying, which in turn lowered ‘burnout’ levels among teachers. However, psychological empowerment did not significantly moderate this mediation, which indicated that its influence did not extend to altering the indirect effect of ‘transformational leadership style’ through ‘workplace bullying.’ In contrast, ‘psychological empowerment’ significantly moderated the relationships between both ‘transactional’ and ‘laissez-faire’ leadership styles and ‘burnout’ through workplace bullying, highlighting its protective role in mitigating the adverse impacts of less effective leadership styles.
- These findings highlight the need for schools to invest in leadership training programmes that strengthen transformational leadership style practices, ensuring that school leaders foster a supportive, engaging, and respectful work environment. At the same time, structured initiatives aimed at enhancing psychological empowerment, such as self-efficacy training, participatory decision-making, and mentorship programmes, should be implemented to build teacher confidence, autonomy, and resilience. In settings where transactional or laissez-faire leadership style is prevalent, anti-bullying strategies must be reinforced. Schools should implement clear reporting systems, foster a culture of mutual support, and offer leadership training with an emphasis on conflict resolution skills. By integrating effective leadership practices with psychological empowerment, schools can cultivate a positive and sustainable work environment that enhances teacher well-being, mitigates burnout, and supports long-term professional development.

5.4 Limitations and suggestions for future research

1. The present study relied on teachers' perceptions to assess the leadership styles of principals. It utilised self-reported data to examine perceptions of leadership styles, burnout, workplace bullying, and psychological empowerment among secondary school teachers. However, the use of self-reported measures may

introduce potential biases, as participants might respond in ways they consider socially desirable rather than providing entirely accurate accounts.

2. The reliance on subjective perceptions can affect the validity of the data, as teachers' interpretations of leadership styles or bullying behaviours may vary based on individual experiences or personality traits. Future research could benefit from incorporating objective measures or multi-source data collection, such as peer evaluations or systematic assessments of leadership behaviours, to yield a more comprehensive view of these dynamics in school settings.
3. The current study was confined to secondary school teachers in Assam. Future research could expand this scope by investigating similar relationships among teachers at the primary, college, and university levels. Examining different educational populations may provide a deeper understanding of how 'perceived leadership styles' of principals-'transformational,' 'transactional,' and 'laissez-faire', 'burnout,' 'workplace bullying,' and 'psychological empowerment' manifest across various educational stages.
4. Additionally, future research could be undertaken across various regions and cultural contexts to examine prevailing patterns and levels of constructs such as perceived leadership styles, burnout, workplace bullying, and psychological empowerment. Regional and cultural variations may shape teachers' perceptions of leadership, their responses to workplace stressors, and the degree of psychological empowerment they experience. Conducting cross-cultural research could help develop normative data and provide insights into the extent to which these constructs are universally applicable or culturally specific, adding valuable insights to the fields of educational psychology and organisational behaviour.
5. Another limitation of the study was its descriptive design, which limited the potential to draw causal inferences among leadership styles, workplace bullying, psychological empowerment, and burnout. While correlations provide insight into possible relationships, they do not clarify the directionality or causative factors in these relationships. Future research would benefit from a longitudinal design, which could track changes in leadership styles, psychological empowerment levels, and teacher burnout over time. Such a

design would allow researchers to examine how variations in leadership style or workplace bullying affect burnout in the long term, providing a clearer picture of causative effects.

6. The current study focused on government and private schools affiliated to/recognised by the Board of Secondary Education, Assam. Future studies could expand this by examining schools affiliated with the Central Board of Secondary Education (CBSE), including public, private, and privately managed or aided institutions. Given that CBSE-affiliated schools follow a uniform curricular and assessment framework prescribed by the Board, yet operate under diverse management bodies with varying administrative practices, organisational policies, and accountability mechanisms, examining teachers working in such institutions could uncover unique factors influencing their perceptions of leadership styles, levels of burnout, experiences of workplace bullying, and sense of psychological empowerment. Including CBSE schools in future research would also enhance the generalizability of findings, providing insights applicable to a wider spectrum of educational contexts across India.
7. In terms of measuring workplace bullying, this study may not have fully captured the complexity and range of workplace bullying within the school environment. The negative acts questionnaire, while a reliable tool, may lack context-specific items that are relevant to educational settings. School-specific workplace bullying behaviours, such as exclusion from collaborative activities could be missed by the standard items on the negative acts questionnaire. Future research could develop or adapt instruments that capture the unique forms of workplace bullying in educational settings, providing a more tailored understanding of how bullying manifests among teachers.
8. Moreover, psychological empowerment was treated as a moderating variable, but this study did not explore how psychological empowerment might interact with other contextual factors, such as school culture, teacher autonomy, or community support, in shaping responses to leadership styles and workplace bullying. Future studies could benefit from investigating the role of additional moderating and mediating variables, such as organisational climate,

professional development opportunities, or teachers' own coping strategies. By examining these factors, researchers can gain a more nuanced understanding of how psychological empowerment influences the burnout-workplace bullying dynamic within different leadership frameworks.

9. Finally, while this study focused on 'transformational,' 'transactional' and 'laissez-faire leadership styles,' future research could expand the scope to include other leadership models, such as distributed or servant leadership, which may have unique impacts on teacher well-being. Exploring a broader range of leadership styles may provide further insights into the specific traits and behaviours that mitigate burnout and workplace bullying or enhance psychological empowerment among teachers. Addressing these limitations and broadening the research scope could substantially enhance the understanding of how leadership, workplace bullying, psychological empowerment, and burnout interact within educational settings, thereby, contributing to more effective interventions and supportive policies for teachers.

BIBLIOGRAPHY

- Abel, M. H., & Sewell, J. (1999). Stress and burnout in rural and urban secondary school teachers. *The journal of educational research*, 92(5), 287-293.
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialities*, 4(2), 330–333.
- Adviser Society. (2024, June 22). *Workplace Bullying in 2024: An Insightful Analysis*. Adviser Society. <https://advisersociety.com/2024/06/22/workplace-bullying-in-2024-an-insightful-analysis/>
- Agervold, M. (2007). Bullying at work: A discussion of definitions and prevalence, based on an empirical study. *Scandinavian Journal of Psychology*, 48(2), 161-172.
- Agyapong, B., Obuobi-Donkor, G., Burbach, L., & Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: A scoping review. *International journal of environmental research and public health*, 19(17), 10706.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA*, 288(16), 1987-1993.
- Alberts, T. (2024). Teacher burnout is real, and the school year is just getting started. *Parents*. Retrieved from <https://www.parents.com/teachers-blame-pandemic-for-kids-behavior-issues-7973310>
- Alharthi, F. B. (2024). Gender differences in perceptions of leadership and their influence on motivation among faculty members of Taif University. *Frontiers in Psychology*, 15, 1476526.
- Allameh, S. M., Heydari, M., & Davoodi, S. M. R. (2012). Studying the relationship between transformational leadership and psychological empowerment of

- teachers in Abade Township. *Procedia-Social and Behavioral Sciences*, 31, 224-230.
- Al-Omari, A., Shudaifat, S., & Abu Nabaa, A. (2008). The effect of leadership styles of principals on teachers' burnout at Russaifa education directorate in Jordan. *Journal of Educational Sciences*, 4(1), 63-78.
- American University. (2019). *The current state of teacher burnout in America*. <https://soeonline.american.edu/blog/the-current-state-of-teacher-burnout-in-america/>
- Anderson, M. (2017). Transformational leadership in education: A review of existing literature. *International Social Science Review*, 93(1), Article 4. <https://digitalcommons.northgeorgia.edu/issr/vol93/iss1/4>
- Anna, K., & Georgia, B. (2023). The Role of the School Principal in Burnout and Job Satisfaction of Secondary School Teachers. *Education Journal*, 12(3), 84-91.
- Antoniou, A.-S., Polychroni, F., & Vlachakis, A.-N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. *Journal of Managerial Psychology*, 21(7), 682–690.
- Ariza-Montes, A., Leal-Rodríguez, A. L., & Leal-Millán, A. G. (2016). Workplace bullying among teachers: An analysis from the Job Demands-Resources (JD-R) model perspective. *Journal of occupational and environmental medicine*, 58(8), 818-827.
- Arneson, H., & Ekberg, K. (2006). Measuring empowerment in working life: A review. *Work*, 26(1), 37-46.
- Arora, C. (2017). A comparative study on Prevalence of Teacher Empowerment between Government and Private Schools in New Delhi. *IJAR*, 3(3), 470-475.
- Ashraf, N., Yasin, M., Farid, G., Ahmad, S., & Khaliq, M. T. (2019). The impact of socio-economic characteristics of school teachers on their job performance. *Journal of Economic Impact*, 1(2), 59–63.

- Atik, S., & Celik, O. T. (2020). An Investigation of the Relationship between School Principals' Empowering Leadership Style and Teachers' Job Satisfaction: The Role of Trust and Psychological Empowerment. *International Online Journal of Educational Sciences*, 12(3).
- Avolio, B. J., & Bass, B. M. (2004). *Multifactor leadership questionnaire manual* (3rd ed.). Mind Garden.
- Avolio, B. J., & Yammarino, F. J. (Eds.). (2013). Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition (Vol. 5). Emerald Group Publishing.
- Aydin, H., & Kaya, Y. (2017). The educational needs of and barriers faced by Syrian refugee students in Turkey: A qualitative case study. *Intercultural Education*, 28(5), 456–473.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organisational Psychology and Organisational Behavior*, 10, 25–53.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Barbosa Jr, R., & Coneway, B. (2023). The unique challenges and best practices for rural school principals: Attracting and retaining skilled teachers in small communities. *School Leadership Review*, 18(1), 1.
- Bartanen, B., & Husain, A. N. (2021). Connected networks in principal value-added models. Paper presented at the annual meeting of the Association for Education Finance and Policy.
- Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organisational effectiveness through transformational leadership*. Sage.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.

- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218. <https://doi.org/10.1037/0021-9010.88.2.207>
- Bayani, Ali. Asghar., Bagheri, Hossein. Bayani ,Ali. (2013) Influence of Gender, Age, and Years of teaching experience on Burnout, Scholars Research Library Annals of Biological Research, 4 (4):239-243
- Becker, J. L., Milad, M. P., & Klock, S. C. (2006). Burnout, depression, and career satisfaction: Cross-sectional study of obstetrics and gynecology residents. *American Journal of Obstetrics and Gynecology*, 195(5), 1444–1449 <https://doi.org/10.1016/j.ajog.2006.06.075>
- Berglund, D., Toropova, A., & Björklund, C. (2024). Workplace bullying, stress, burnout, and the role of perceived social support: findings from a Swedish national prevalence study in higher education. *European Journal of Higher Education*, 1-21.
- Berglund, D., Toropova, A., & Björklund, C. (2025). Workplace bullying, stress, burnout, and the role of perceived social support: findings from a Swedish national prevalence study in higher education. *European Journal of Higher Education*, 15(2), 185-205.
- Bernotaite, L., & Malinauskiene, V. (2017). Workplace bullying and mental health among teachers in relation to psychosocial job characteristics and burnout. *International journal of occupational medicine and environmental health*, 30(4), 629-640.
- Bernstein, C., & Batchelor, T. P. (2022). Qualitative exploration of workplace demands, resources and bullying among teachers in South African schools: Implications for individual and organisational well-being. *South African Journal of Education*, 42(2), 1-9.
- Bhalla, J. (2019). Self regulated learning strategies of higher education students in relation to casual attribution and self emotional management.

- Biggs, A., & Brough, P. (2006). Burnout among occupational groups: Examining the utility of the Copenhagen Burnout Inventory. *International Journal of Stress Management*, 13(3), 347–358. <https://doi.org/10.1037/1072-5245.13.3.347>
- Bjorner, J. B., Kristensen, T. S., Orth-Gomer, K., & Rugulies, R. (2006). Measuring psychosocial work characteristics and well-being in relation to cardiovascular disease. *International Journal of Behavioral Medicine*, 13(2), 112–123. <https://doi.org/10.1207/s15327558ijbm1302>
- Blase, J., & Blase, J. (2002). The dark side of leadership: teacher perspectives of principal mistreatment. *Educational Administration Quarterly*, 38(5), 671-727.
- Blase, J., & Blase, J. (2011). The dark side of school leadership: Implications for teacher morale, teacher burnout, and student learning. *Journal of Educational Administration*, 49(5), 404-428.
- Blase, J., & Blase, J. J. (2018). Mistreatment of teachers. *The TESOL Encyclopedia of English Language Teaching*, 1-9.
- Blatt, D. A. (2002). A study to determine the relationship between the leadership styles of career technical directors and school climate as perceived by teachers (Doctoral dissertation, West Virginia University). Retrieved from <https://researchrepository.wvu.edu/etd/8495>
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quinonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6, 149. <https://doi.org/10.3389/fpubh.2018.00149>
- Bogler, R., & Nir, A. E. (2012). The importance of teachers' perceived organisational support to job satisfaction: What's empowerment got to do with it?. *Journal of educational administration*, 50(3), 287-306.

- Bolkan, S., & Goodboy, A. K. (2009). Transformational leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology*, 36(4), 296–306.
- Borritz, M., Christensen, K. B., Bültmann, U., Rugulies, R., Lund, T., Andersen, I., & Villadsen, E. (2005). Impact of burnout and psychosocial work characteristics on future long-term sickness absence. *Prospective Journal of Occupational Health Psychology*, 10(1), 17–28. <https://doi.org/10.1037/1076-8998.10.1.17>
- Borritz, M., Christensen, K. B., Rugulies, R., Villadsen, E., & Kristensen, T. S. (2010). Burnout as a predictor of self-reported sickness absence among human service workers: Prospective findings from three-year follow-up of the PUMA study. *Journal of Occupational and Environmental Medicine*, 67(1), 30–35. <https://doi.org/10.1136/oem.2008.039982>
- Botha, M. (2024). Navigating Teacher Well-Being in Globalized Education: Challenges and Recommendations. In *Proceedings of the International Conference on Education Research*. Academic Conferences and publishing limited.
- Brousse, G., Fontana, L., Ouchchane, L., Bois, C., Schmitt, A., Perrier, A., & Llorca, P. M. (2008). Psychopathological features of workplace bullying. *Occupational Medicine*, 58(2), 122-128. , <https://doi.org/10.1093/occmed/kqm148>
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological methods & research*, 21(2), 230-258.
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681–711. <https://doi.org/10.1353/etc.2014.0032>
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

- Byrne, B. M. (1998). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. Psychology Press.
<https://doi.org/10.4324/9781410600188>
- Byrne, B. M. (2001). *Structural equation modelling with AMOS: Basic concepts, applications, and programming*. Lawrence Erlbaum Associates.
- Cabana, E., Lillo, R. E., & Laniado, H. (2021). Multivariate outlier detection based on a robust Mahalanobis distance with shrinkage estimators. *Statistical papers*, 62, 1583-1609.
- Caganaga, C. K. (2015). Principals' reflections on effectively managing their schools: Cooperative leadership and its role in schools. *Open Access Library Journal*, 2(11), 1.
- Cao, W., Li, P., C. van der Wal, R., & W. Taris, T. (2023). Leadership and workplace aggression: A meta-analysis. *Journal of Business Ethics*, 186(2), 347-367.
- Catherine Scheeler, M., Markelz, A., Taylor, J. C., Deshpande, D. S., & Wolfe, P. (2022). Teacher workplace bullying: how pervasive is the problem? *Teacher Education and Special Education*, 45(2), 123-140.
- Cemaloglu, N. (2007). The exposure of primary school teachers to bullying: An analysis of various variables. *Social Behavior and Personality: an international journal*, 35(6), 789-802.
- Cemaloglu, N. (2011). Primary principals' leadership styles, school organisational health and workplace bullying. *Journal of Educational Administration*, 49(5), 495-512.
- Cemaloglu, N. (2017). The relationship between leadership styles of primary school principals and organisational health of school and workplace bullying. *Journal of Educational Administration*, 49(5), 1-37.

- Center for Creative Leadership. (2023). *The role of power in effective leadership*.
<https://www.ccl.org/articles/leading-effectively-articles/the-role-of-power-in-effective-leadership/>
- Cerit, Y. (2013). The Relationship between Paternalistic Leadership and Bullying Behaviours towards Classroom Teachers. *Educational Sciences: Theory and Practice*, 13(2), 847-851.
- Chakravorty, A., & Singh, P. (2021). Correlates of burnout among Indian primary school teachers. *International Journal of Organisational Analysis*, 30(2), 589-605. <https://doi.org/10.1108/IJOA-09-2020-2420>
- Chaurasia, Rohini & Naaz, Ishrat. (2022). Occupational Stress among Secondary School Teachers. 7. 8-12. Retrieved from <https://www.researchgate.net/publication/361017323>
- Cheung, C. M., Zhang, R. P., Cui, Q., & Hsu, S. C. (2021). The antecedents of safety leadership: The job demands-resources model. *Safety Science*, 133, 104979. <https://doi.org/10.1016/j.ssci.2020.104979>
- Ciby, M., & Raya, R. P. (2014). Exploring victims' experiences of workplace bullying: A grounded theory approach. *Vikalpa: The Journal for Decision Makers*, 39(2), 69–82. <https://doi.org/10.1177/0256090920140205>
- Clark, L. A., & Watson, D. (2016). Constructing validity: Basic issues in objective scale development.
- CNBC TV18. (2021, September 15). *Employee burnout on the rise in India, says LinkedIn report; many look forward to hybrid model*.
<https://www.cnbctv18.com/business/employee-burnout-on-the-rise-in-india-says-linkedin-report-many-look-forward-to-hybrid-model-10741621.htm>
- Coakes, S. J. (2013). *SPSS: Analysis without anguish: Version 20 for Windows*. Wiley

- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of educational psychology*, 104(4), 1189
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2018). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189–1204. <https://doi.org/10.1037/a0029356>
- Cowie, H., Naylor, P., Rivers, I., Smith, P. K., & Pereira, B. (2002). Measuring workplace bullying. *Aggression and Violent Behavior*, 7(1), 33-51. [https://doi.org/10.1016/S1359-1789\(00\)00034-3](https://doi.org/10.1016/S1359-1789(00)00034-3)
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Daniels, M. A., & Greguras, G. J. (2019). Exploring the nature of power distance: Implications for micro- and macro-level theories, processes, and outcomes. *Journal of Management*, 45(2), 482–511. <https://doi.org/10.1177/0149206314527131>
- Danner, D. (2016). Reliability-The precision of a measurement (Version 2.0).
- Dash, S. S., & Vohra, N. (2019). The leadership of the school principal: Impact on teachers' job crafting, alienation and commitment. *Management Research Review*, 42(3), 352-369.
- Day, C., & Sammons, P. (2013). *Successful school leadership*. Education Development Trust.
- D'Cruz, P., & Rayner, C. (2013). Bullying in the Indian workplace: A study of the ITES-BPO sector. *Economic and Industrial Democracy*, 34(4), 597-619. <https://doi.org/10.1177/0143831X12452672>

- De Vos, J., & Kirsten, G. J. C. (2015). The nature of workplace bullying experienced by teachers and the biopsychosocial health effects. *South African Journal of Education*, 35(3), 1-9.
- De Wet, C. (2014). Educators' understanding of workplace bullying. *South African Journal of Education*, 34(1), 1-16.
- De Wet, C., & Jacobs, L. (2013). South African teachers' exposure to workplace bullying. *TD: The Journal for Transdisciplinary Research in Southern Africa*, 9(3), 446-464.
- Dehue, F., Bolman, C., Völlink, T., & Pouwelse, M. (2012). Coping with bullying at work and health related problems. *International Journal of Stress Management*, 19(3), 175.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Den Hartog, D. N. (2019). Transformational leadership. In *Encyclopedia of Business and Professional Ethics* (pp. 1–4). Springer. https://doi.org/10.1007/978-3-319-23514-1_57-1
- DeVellis, R. F., & Thorpe, C. T. (2021). *Scale development: Theory and applications*. Sage publications.
- Diebig, M., Bormann, K. C., & Rowold, J. (2017). Day-level transformational leadership and followers' daily level of stress: A moderated mediation model of team cooperation, role conflict, and type of communication. *European Journal of Work and Organisational Psychology*, 26(2), 234–249.
- Directorate of Economics and Statistics, Government of Assam. (2021). *Economic survey, Assam 2020-21*. Government of Assam.
- Doney, P. A. (2018). Fostering resilience: A necessary skill for teacher retention. *Journal of Educational Leadership, Policy, and Practice*, 33(1), 35–45

- Dussault, M., & Frenette, É. (2015). Supervisors' transformational leadership and bullying in the workplace. *Psychological Reports, 117*(3), 724–733. <https://doi.org/10.2466/01.PR0.117c30z2>
- Dworkin, A. G., Saha, L. J., & Hill, A. N. (2003). Teacher burnout and perceptions of a democratic school environment. *International Education Journal, 4*(2), 108-120.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychological bulletin, 129*(4), 569.
- Education International. (2023). Teacher wellbeing – a global challenge. <https://www.ei-ie.org/en/item/28077%3Ateacher-wellbeing-a-global-challenge>
- Education Support. (2021). *Teacher Wellbeing Index 2021*. <https://www.educationsupport.org.uk/media/qzna4gxb/twix-2021.pdf>
- Einarsen, S. (1999). The nature and causes of bullying at work. *International Journal of Manpower, 20*(1/2), 16-27. <https://doi.org/10.1108/01437729910268687>
- Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and violent behavior, 5*(4), 379-401.
- Einarsen, S., & Raknes, B. I. (1997). Harassment in the workplace and the victimization of men. *Violence and victims, 12*(3), 247-263.
- Einarsen, S., & Skogstad, A. (1996). Bullying at work: Epidemiological findings in public and private organisations. *European Journal of Work and Organisational Psychology, 5*(2), 185-201. <https://doi.org/10.1080/13594329608414854>
- Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. *The leadership quarterly, 18*(3), 207-216.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure, and psychometric properties of

- the Negative Acts Questionnaire-Revised. *Work & Stress*, 23(1), 24–44.
<https://doi.org/10.1080/02678370902815673>
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2003). *Bullying and emotional abuse in the workplace: International perspectives in research and practice*. Taylor & Francis. <https://doi.org/10.1201/9780203164662>
- Einarsen, S., Matthiesen, S., & Skogstad, A. (1998). Bullying, burnout and well-being among assistant nurses. *Journal of Occupational Health and Safety Australia and New Zealand*, 14, 563-568.
- El-Omari, A. H., & Freihat, A. A. (2011). Burnout levels of Jordanian teachers of English in Ajloun Province.
- Erturk, R. (2022). The prediction level of teachers' perceptions of psychological empowerment on job satisfaction and organisational citizenship behaviors. *International Journal of Modern Education Studies*, 6(2), 346-377.
- Erturk, R. (2022). The prediction level of teachers' perceptions of psychological empowerment on job satisfaction and organisational citizenship behaviours. *International Journal of Modern Education Studies*, 6(2), 346-377.
- Escartín, J., Rodríguez-Carballeira, A., Zapf, D., Porrúa, C., & Martín-Peña, J. (2009). Perceived severity of various bullying behaviours at work and the relevance of exposure to bullying. *Work & Stress*, 23(3), 191-205.
- European Foundation for the Improvement of Living and Working Conditions (Ed.). (2012). *5th [fifth] European Working Conditions Survey: Overview Report*. Publications Office of the European Union.
- Even, U., & BenDavid-Hadar, I. (2025). Teachers' perceptions of their school principal's leadership style and improvement in their students' performance in specialized schools for students with conduct disorders. *Management in Education*, 39(1), 5-18.

- Evers, W. J. G., Brouwers, A., & Tomic, W. (2009). Burnout and self-efficacy: A study on teachers' beliefs when implementing an innovative educational system in the Netherlands. *British Journal of Educational Psychology*, 72(2), 227–243. <https://doi.org/10.1348/000709902158865>
- Eyal, O., & Roth, G. (2011). Principals' leadership and teachers' motivation: Self-determination theory analysis. *Journal of educational administration*, 49(3), 256-275.
- Fida, R., Laschinger, H. K. S., & Leiter, M. P. (2018). The protective role of self-efficacy against workplace incivility and burnout in nursing: A time-lagged study. *Health care management review*, 43(1), 21-29.
- Field, A. (2009). *Discovering statistics using SPSS: Introducing statistical method*.
- Fiorilli, C., De Stasio, S., Benevene, P., Fioredistella Iezzi, D. O. M. E. N. I. C. A., Pepe, A., & Albanese, O. (2015). Copenhagen burnout inventory (CBI): a validation study in an Italian teacher group. *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, 22(4).
- Fiorilli, C., De Stasio, S., Di Chiacchio, C., Pepe, A., & Salmela-Aro, K. (2015). School burnout, depressive symptoms, and engagement: Their combined effect on student achievement. *International Journal of Educational Research*, 74, 1–9. <https://doi.org/10.1016/j.ijer.2015.06.004>
- Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education*, 14(1), 1-36.
- Fisher-Blando, J. L. (2008). *Workplace bullying: Aggressive behavior and its effect on job satisfaction and productivity* (Doctoral dissertation). University of Phoenix. ProQuest Dissertations Publishing.
- Fleming, C. M., Calvert, H. G., & Turner, L. (2023). Burnout among school staff: A longitudinal analysis of leadership, connectedness, and psychological safety.

School Mental Health, 15(3), 900–912. <https://doi.org/10.1007/s12310-023-09594-x>

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>

Ganjali, F., & Mehdinezhad, V. (2016). Relationship between high school principals' transformational leadership and psychological empowerment. *Soc. Sci*, 11, 5771-5775.

García, E., & Weiss, E. (2020). A Policy Agenda to Address the Teacher Shortage in US Public Schools: The Sixth and Final Report in the 'Perfect Storm in the Teacher Labor Market' Series. *Economic Policy Institute*.

Garcia, L. (2024). *Workplace Bullying in K-12 Education* (Doctoral dissertation, University of Texas at El Paso). Retrieved from https://scholarworks.utep.edu/open_etd/4094

Gardenhour, C. (2008). *Teachers' perceptions of empowerment in their work environments as measured by the Psychological Empowerment Instrument* (Doctoral dissertation, East Tennessee State University).

Gavish, B., & Friedman, I. A. (2010). Novice teachers' experience of teaching: A dynamic aspect of burnout. *Social psychology of education*, 13, 141-167.

George, D., & Mallery, P. (2024). *IBM SPSS statistics 29 step by step: A simple guide and reference*. Routledge.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *International journal of endocrinology and metabolism*, 10(2), 486.

Gil-Monte, P. R., & Figueiredo-Ferraz, H. (2013). Psychometric properties of the 'Spanish Burnout Inventory' among employees working with people with

- intellectual disability. *Journal of Intellectual Disability Research*, 57(10), 959–968. <https://doi.org/10.1111/j.1365-2788.2012.01591.x>
- Giorgi, G., Mancuso, S., Perez, F. F., D'Antonio, A. C., Mucci, N., & Cupelli, V. (2016). Detrimental effects of workplace bullying: Impediment of self-management competence via psychological distress. *Frontiers in Psychology*, 7, 60. <https://doi.org/10.3389/fpsyg.2016.00060>
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32(6), 857-874. <https://doi.org/10.1080/01411920600989511>
- Gonzales, J. L. (2021, October). Guide to elaborate the operationalization of variables. *Espacio I+D, Innovación más Desarrollo*, x(28).
- Government of Assam. (n.d.). *Districts of Assam*. Government of Assam. Retrieved October 5, 2025, from <https://assam.gov.in/>
- Gu, Q., & Day, C. (2007). Teachers resilience: A necessary condition for effectiveness. *Teaching and Teacher education*, 23(8), 1302-1316.
- Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173–208. <https://doi.org/10.3102/00346543076002173>
- Gupta, R., & Bakhshi, A. (2018). Workplace bullying and organisational well-being: a moderated mediation model of psychological capital and burnout in human services sector of India. In *Indian perspectives on workplace bullying: A decade of insights* (pp. 111-146). Singapore: Springer Singapore.
- Gupta, R., Bakhshi, A., & Einarsen, S. (2017). Investigating workplace bullying in India: Psychometric properties, validity, and cutoff scores of negative acts questionnaire–revised. *Sage Open*, 7(2), 2158244017715674.
- Gupta, R., Kumar, A., & Singh, R. (2017). Exploring workplace bullying in India: A study of its prevalence and impact on employee well-being. *International*

Journal of Human Resource Management, 28(16), 2315–2339.
<https://doi.org/10.1080/09585192.2017.1340328>

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
<https://doi.org/10.1016/j.jsp.2005.11.001>

Hamann, D. L., & Gordon, D. G. (2000). Burnout An Occupational Hazard: Many elements of a music teacher's life can contribute to stress and burnout. Here are some ideas to cope with and treat the condition before it becomes debilitating. *Music Educators Journal*, 87(3), 34-39.

Hampton, D., & Rayens, M. K. (2019). Impact of psychological empowerment on workplace bullying and intent to leave. *JONA: The Journal of Nursing Administration*, 49(4), 179-185.

Harvard Business School. (2023). *What makes a leader?* <https://hbr.org/2004/01/what-makes-a-leader>

Hauge, L. J., Skogstad, A., & Einarsen, S. (2010). The relative impact of workplace bullying as a social stressor at work. *Scandinavian Journal of Psychology*, 51(5), 426-433. <https://doi.org/10.1111/j.1467-9450.2010.00813>.

Hauserman, C. P., Ivankova, N. V., & Stick, S. L. (2013). Teacher perceptions of principals' leadership qualities: A mixed methods study. *Journal of school Leadership*, 23(1), 34-63.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Heenan, I. W., De Paor, D., Lafferty, N., & Mannix McNamara, P. (2023). The impact of transformational school leadership on school staff and school culture in

- primary schools—A systematic review of international literature. *Societies*, 13(6), Article 133. <https://doi.org/10.3390/soc13060133>
- Herman, K. C., Prewett, S. L., Eddy, C. L., Savala, A., & Reinke, W. M. (2020). *Profiles of middle school teacher stress and coping: Concurrent and prospective correlates. Journal of School Psychology*, 78, 54–68. <https://doi.org/10.1016/j.jsp.2019.11.003>
- Hildenbrand, K., Sacramento, C. A., & Binnewies, C. (2018). Transformational leadership and burnout: The role of thriving and followers' openness to experience. *Journal of occupational health psychology*, 23(1), 31.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modelling technique. *Journal of Quantitative Methods*, 3(1), 76.
- Hoel, H., & Cooper, C. L. (2000). *Destructive conflict and bullying at work*. Manchester: Manchester School of Management, UMIST.
- Hoel, H., Glasø, L., Hetland, J., Cooper, C. L., & Einarsen, S. (2010). Leadership styles as predictors of self-reported and observed workplace bullying. *British Journal of Management*, 21(2), 453-468. <https://doi.org/10.1111/j.1467-8551.2009.00664>.
- Hoffmann, M., & Kasten, N. (2017). Urban teachers' perceptions of leadership: The role of principal-teacher interactions in teacher retention. *Urban Education*, 52(7), 858–884. <https://doi.org/10.1177/0042085915574531>
- Hogh, A., Hoel, H., & Carneiro, I. G. (2011). Bullying and employee turnover among healthcare workers: a three-wave prospective study. *Journal of nursing management*, 19(6), 742-751.
- Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organisational science. *Applied Psychology*, 74(1), e12592.

- Howard, M. C., Boudreaux, M., Cogswell, J., Manix, K. G., & Oglesby, M. T. (2025). A literature review of model fit and model comparisons with confirmatory factor analysis: Formalizing the informal in organisational science. *Applied Psychology*, 74(1), e12592.
- Hoy, W. K., & Miskel, C. G. (2008). Educational administration: Theory, research, and practice. *McGraw-Hill 8th ed.*
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hussein Farag Hassan, H., & Anter Abdallah Kandeel, H. (2022). The Structural Model of Bullying, Burnout, Job Satisfaction, Coping Strategies and Organisational Commitment among teachers in Saudi Arabia and Egypt. *Journal of the Faculty of Education, Benha University*, 33(130), 1–40
- Hutcheson, G. D., & Sofroniou, N. (1999). The multivariate social scientist: Introductory statistics using generalized linear models.
- Hutchinson, M. (2014). Bullying as workgroup manipulation: A model for understanding patterns of victimization and contagion within the workgroup. *Journal of Nursing Management*, 22(5), 563-571. <https://doi.org/10.1111/jonm.12040>
- İnandi, Y., & Büyüközkan, A. S. (2022). The relationship between mobbing, alienation and burnout among teachers in Mersin, Turkey. *South African Journal of Education*, 42(1), 1-12.
- India Today Web Desk. (2020, January 9). *The epidemic of teacher stress and how it affects students: What's the solution?* India Today. <https://www.indiatoday.in/education-today/featurephilia/story/the-epidemic-of-teacher-stress-and-how-it-affects-students-what-s-the-solution-1635373-2020-01-09>

- India Today Web Desk. (2020, December 22). *55% Indian employees bullied at work: Effects of workplace bullying and how to address the issue*. India Today. <https://www.indiatoday.in/education-today/jobs-and-careers/story/55-indian-employees-bullied-at-work-effects-of-workplace-bullying-and-how-to-address-the-issue-1752096-2020-12-22>
- Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2002). Burnout among people working with intellectually disabled persons: A theory update and an example. *Scandinavian Journal of Caring Sciences*, 16(3), 272–279. <https://doi.org/10.1046/j.1471-6712.2002.00085.x>
- International Labour Organization, Lloyd's Register Foundation, & Gallup. (2022). *Experiences of violence and harassment at work: A global first survey*.
- Javid, L., Irfan, K., & Khattak, N. A. (2023). Impact of workplace bullying and knowledge hiding behaviour on emotional exhaustion among Pakistani nurses: a cross-sectional study for exploring psychological empowerment as an effective role player in the healthcare system. *Global Social Sciences Review*, VIII.
- Javidan, M., & House, R. J. (2001). Cultural acumen for the global manager: Lessons from Project GLOBE. *Organisational Dynamics*, 29(4), 289–305. [https://doi.org/10.1016/S0090-2616\(01\)00034-1](https://doi.org/10.1016/S0090-2616(01)00034-1)
- Jensen, M. T. (2022). Are test-based policies in the schools associated with burnout and bullying? A study of direct and indirect associations with pupil-teacher ratio as a moderator. *Teaching and Teacher Education*, 113, 103670.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2), 178–187. <https://doi.org/10.1108/02683940510579803>
- Jovanovic, D., & Ciric, M. (2016). Benefits of transformational leadership in the context of education. *The European Proceedings of Social & Behavioural Sciences EpSBS*, 118–124. <https://doi.org/10.15405/epsbs.2016.11.17>

- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of applied psychology*, 89(5), 755.
- Kanste, O., Kyngas, H., & Nikkilä, J. (2007). The relationship between multidimensional leadership and burnout among nursing staff. *Journal of nursing management*, 15(7), 731-739.
- Karakus, M., & Çankaya, Z. C. (2023). The effect of workplace bullying on fatigue in school teachers: The moderating role of spirituality and gender. *Middle East Journal of Positive Psychology*, 9(1), 23-38.
- Karatza, C., Zyga, S., Tziaferi, S., & Prezerakos, P. (2017). Workplace bullying and general health status among the nursing staff of Greek public hospitals. *Annals of General Psychiatry*, 16, 1-5. <https://doi.org/10.1186/s12991-017-0137-z>
- Kelly, R. J., & Hearld, L. R. (2020). Burnout and leadership style in behavioral health care: A literature review. *The journal of behavioral health services & research*, 47(4), 581-600.
- Khoury, S. Z. (2024). *The Relationship Between Psychological Empowerment and Demographic Variables Among Secondary Public-School Educators* (Doctoral dissertation, Cornerstone University).
- Kiboss, J. K., & Jemiryott, H. K. (2014). Relationship between principals' leadership styles and secondary school teachers' job satisfaction in Nandi South District, Kenya. *Journal of Education and Human Development*, 3(2), 493–509.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative dentistry & endodontics*, 38(1), 52.
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & stress*, 19(3), 192-207.

- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of educational Psychology, 102*(3), 741.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Klusmann, U., Aldrup, K., Schmidt, J., & Lüdtke, O. (2021). Is emotional exhaustion only the result of work experiences? A diary study on daily hassles and uplifts in different life domains. *Anxiety, Stress, & Coping, 34*(2), 173-190.
- Koberg, C. S., Boss, R. W., Senjem, J. C., & Goodman, E. A. (1999). Antecedents and outcomes of empowerment: Empirical evidence from the health care industry. *Group & organisation management, 24*(1), 71-91.
- Kollerova, L., Květon, P., Zábrowská, K., & Janošová, P. (2023). Teacher exhaustion: The effects of disruptive student behaviors, victimization by workplace bullying, and social support from colleagues. *Social Psychology of Education, 26*(4), 885-902.
- Kollerová, L., Květon, P., Zábrowská, K., & Janošová, P. (2023). Teacher exhaustion: The effects of disruptive student behaviors, victimization by workplace bullying, and social support from colleagues. *Social Psychology of Education, 26*(4), 885-902.
- Kolzow, D. R. (2014). *Leading from within: Building organisational leadership capacity*. International Economic Development Council.
- Konert, E. (1997). *The relationship among middle-school teacher burnout, stress, job satisfaction, and coping styles*. Wayne State University.
- Koul, L. (2009). *Methodology of educational research* (4th ed.). Vikas Publishing House

- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress, 19*(3), 192–207. <https://doi.org/10.1080/02678370500297720>
- Kumar, R. (2018). Research methodology: A step-by-step guide for beginners.
- Kumari, S., & Goel, R. (2024). Leadership Styles in Education: A Comparative Study of Government and Private Schools. *International Journal of Research Publication and Reviews, 5*(10), 1639–1642.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610.
- Kyriacou, C. (2015). Teacher stress and burnout: An international review. *Educational Psychology, 25*(1), 23-47. <https://doi.org/10.1080/0144341042000292819>
- Lamm, K. W., Lamm, A. J., & Edgar, D. (2020). Scale development and validation: Methodology and recommendations. *Journal of International Agricultural and Extension Education, 27*(2), 24-35.
- Laschinger, H. K. S., Wong, C. A., & Grau, A. L. (2010). The influence of authentic leadership on newly graduated nurses' experiences of workplace bullying, burnout, and retention outcomes: A cross-sectional study. *International Journal of Nursing Studies, 49*(10), 1266–1276. <https://doi.org/10.1016/j.ijnurstu.2012.05.012>
- Lau, P. S., Yuen, M. T., & Chan, R. M. (2005). Do demographic characteristics make a difference to burnout among Hong Kong secondary school teachers?. *Social Indicators Research, 71*, 491-516.
- Leach, T. (2022). The hammer and the scalpel: A teacher's experience of workplace bullying. *Studies in Technology Enhanced Learning, 2*(3).
- Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organisational commitment. *Journal of Organisational Behavior, 9*(4), 297-308. <https://doi.org/10.1002/job.4030090402>

- Leithwood, K., & Jantzi, D. (2005). A review of transformational school leadership research 1996–2005. *Leadership and policy in schools*, 4(3), 177-199.
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School effectiveness and school improvement*, 17(2), 201-227.
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077>
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. The Wallace Foundation.
- Leon-Perez, J. M., Escartín, J., & Giorgi, G. (2021). The presence of workplace bullying and harassment worldwide. In P. D’Cruz, E. Noronha, G. Notelaers, & C. Rayner (Eds.), *Handbooks of Workplace Bullying, Emotional Abuse and Harassment, Vol. 1: Concepts, Approaches and Methods* (pp. 55–86). Springer. https://doi.org/10.1007/978-981-13-0134-6_3
- Loewen, S., & Gonulal, T. (2015). Exploratory factor analysis and principal components analysis. *Advancing quantitative methods in second language research*, 182-212.
- Lumley, T., Diehr, P., Emerson, S., & Chen, L. (2002). The importance of the normality assumption in large public health data sets. *Annual review of public health*, 23(1), 151-169.
- Lutgen-Sandvik, P. (2007). *The communicative cycle of employee emotional abuse: Generation and regeneration of workplace mistreatment*. *Management Communication Quarterly*, 20(4), 473-501. <https://doi.org/10.1177/0893318906293605>

- Lutgen-Sandvik, P. (2008). Intensive remedial identity work: Responses to workplace bullying trauma and stigmatization. *Organisation*, 15(1), 97-119. <https://doi.org/10.1177/1350508407084487>
- Makarem, N. N., Tavitian-Elmadjian, L. R., Brome, D., Hamadeh, G. N., & Einarsen, S. (2018). Assessment of workplace bullying: Reliability and validity of an Arabic version of the Negative Acts Questionnaire-Revised (NAQ-R). *BMJ open*, 8(12), e024009.
- Malik, N. A., & Björkqvist, K. (2019). Workplace bullying and occupational stress among university teachers: Mediating and moderating factors. *Europe's journal of psychology*, 15(2), 240.
- Marcello, C. V. (2010). *A correlational analysis: Perceptions of workplace bullying and psychological empowerment among IT professionals* (Doctoral dissertation, University of Phoenix).
- Maslach, C., & Leiter, M. P. (2016). Burnout. Stress: Concepts, cognition, emotion, and behavior. *Elsevier*, 51-357.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1993). *Maslach Burnout Inventory Manual* (3rd ed.). Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2016). Transformational leadership related to school climate: A multi-level analysis. *Educational management administration & leadership*, 44(2), 322-342.
- Mehmood, S., Rasool, M., Ahmed, M., Haddad, H., & Al-Ramahi, N. M. (2024). Role of workplace bullying and workplace incivility for employee performance: Mediated-moderated mechanism. *PLOS ONE*, 19(1), e0291877. <https://doi.org/10.1371/journal.pone.0291877>

- Meidelina, O., Saleh, A. Y., Cathlin, C. A., & Winesa, S. A. (2023). Transformational Leadership and Teacher Well-Being: A Systematic Review. *Journal of Education and Learning (EduLearn)*, 17(3), 417-424.
- Mendes, E. J. (2002). *The relationship between emotional intelligence and occupational burnout in secondary school teachers* (Doctoral dissertation, Walden University).
- Microsoft. (2020, October 7). *Close to one third of workers in India face increased burnout at work*. Microsoft News.<https://news.microsoft.com/en-in/close-to-one-third-of-workers-in-india-face-increased-burnout-at-work/>
- Milfont, T. L., Denny, S., Ameratunga, S., Robinson, E., & Merry, S. (2008). Burnout and wellbeing: Testing the Copenhagen burnout inventory in New Zealand teachers. *Social indicators research*, 89, 169-177.
- Mills, C. B., Keller, M., Chilcutt, A., & Nelson, M. D. (2019). No laughing matter: Workplace bullying, humor orientation, and leadership styles. *Workplace health & safety*, 67(4), 159-167.
- Ministry of Human Resource Development. (2020). *National Education Policy 2020*. Government of India
- Molly, H. Fisher (2011). Factors Influencing Stress, Burnout, and Retention of Secondary Teachers, *Current Issues in Education* Vol. 14 No. 1(1-36)
- Montero-Marín, J., Prado-Abril, J., Piva Demarzo, M. M., Gascon, S., & García-Campayo, J. (2014). Coping with stress and types of burnout: Explanatory power of different coping strategies. *PLOS ONE*, 9(2), e89090. <https://doi.org/10.1371/journal.pone.0089090>
- Moscicka-Teske, A., Drabek, M., & Pyżalski, J. (2014). Experienced bullying and hostile behavior in the workplace and symptoms of burnout in teachers. *Medycyna pracy*, 65(4), 535-542.

- Moss, J. (2019). *Burnout is about your workplace, not your people*. Harvard Business Review.
- Mousavy, Seyedehhava., Thomas, Sakinah. Nur., Mukundan, Jayakaran. (2012) Burnout among Low and High Experienced Teachers. *International Journal of Applied Linguistics & English Literature* ISSN 2200-3452 Vol. 1 No. 4;
- Moye, M. J., Henkin, A. B., & Egley, R. J. (2004). Teacher-principal relationships: Exploring linkages between empowerment and interpersonal trust. *Journal of Educational Administration*, 43(3), 260–277. <https://doi.org/10.1108/09578230510594796>
- Mufti, M., Xiaobao, P., Shah, S. J., Sarwar, A., & Zhenqing, Y. (2020). Influence of leadership style on job satisfaction of NGO employee: The mediating role of psychological empowerment. *Journal of Public Affairs*, 20(1), e1983.
- Naik, G., & Giri, A. (2018). *Research methodology for social sciences*. SAGE Publications India.
- Nanjundeswaraswamy, T. S., & Swamy, D. R. (2014). Leadership styles. *Advances in Management*, 7(2), 57–62.
- Nielsen, M. B., Christensen, J. O., Finne, L. B., & Knardahl, S. (2021). Workplace bullying, mental distress, and sickness absence: The protective role of social support. *International Archives of Occupational and Environmental Health*, 94(7), 1291–1299. <https://doi.org/10.1007/s00420-021-01664-9>
- Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2009). The impact of methodological moderators on prevalence rates of workplace bullying: A meta-analysis. *Journal of Occupational and Organisational Psychology*, 82(2), 395–424
- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glaso, L., Aasland, M. S., & Einarsen, S. (2011). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European Journal of Work and Organisational Psychology*, 20(1), 81–101. <https://doi.org/10.1080/13594320903484857>

- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glaso, L., Aasland, M. S., & Einarsen, S. (2011). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European Journal of Work and Organisational Psychology, 20*(1), 81–101. <https://doi.org/10.1080/13594320903484857>
- Norbu, C., & Ghalay, B. B. (2023). Leadership Practices, Teacher Motivation, Burnout, and Teacher Satisfaction in Tsirang Dzongkhag. *Educational Innovation and Practice, 6*.
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: what can be done?. *Assessment & evaluation in higher education, 33*(3), 301-314.
- Office for Research Integrity. (2023). Research methods and data analysis. U.S. Department of Health & Human Services
- Oh, H., Uhm, D. C., & Yoon, Y. J. (2016). Workplace bullying, job stress, intent to leave, and nurses' perceptions of patient safety in South Korea. *Nursing Research, 65*(5), 380-388.
- Okcu, V., & Cetin, H. (2017). Investigating the Relationship among the Level of Mobbing Experience, Job Satisfaction and Burnout Levels of Primary and Secondary School Teachers. *Universal Journal of Educational Research, 5*(1), 148-161.
- Okcu, V., Cemaloglu, N., & Ay, I. (2025). The Effect of School Principals' Empowering Leadership Behaviors on Well-Being at Work: The Mediating Role of Organisational Ostracism. *The Asia-Pacific Education Researcher, 34*(2), 777-791.
- Onan, G., Surucu, L., Bekmezci, M., Dalmış, A. B., & Sunman, G. (2025). Relationships Between Positive Leadership Styles, Psychological Resilience, and Burnout: An Empirical Study Among Turkish Teachers. *Behavioral Sciences, 15*(6), 713.

- Orcan, F. (2018). Exploratory and confirmatory factor analysis: which one to use first?. *Journal of Measurement and Evaluation in Education and Psychology*, 9(4), 414-421.
- Organisation for Economic Co-operation and Development. (2019). *Review education policies*. OECD. <https://gpseducation.oecd.org/revieweducationpolicies/>
- Organisation for Economic Co-operation and Development. (2021). *Education at a Glance 2021: OECD Indicators*. OECD Publishing
- Organisation for Economic Co-operation and Development. (2021). *OECD digital education outlook 2021: Pushing the frontiers with artificial intelligence, blockchain, and robots*. OECD Publishing. https://www.oecd-ilibrary.org/education/oecd-digital-education-outlook-2021_589b283f-en
- Orunbon, N. O., & Ibikunle, G. A. (2023). Principals' Toxic Leadership Behaviour and Teachers' Workplace Incivility in Public Senior Secondary Schools, Lagos State, Nigeria. *EduLine: Journal of Education and Learning Innovation*, 3(2), 202-213.
- Osborne, J. W. (2012). *Best practices in data cleaning: A complete guide to everything you need to do before and after collecting your data*. Sage publications.
- Ozaralli, N. (2015). Linking empowering leadership to work engagement and employee outcomes: The role of psychological empowerment and proactive personality. *Procedia - Social and Behavioral Sciences*, 181, 366-376. <https://doi.org/10.1016/j.sbspro.2015.04.899>
- Ozdemir, Y. (2007). The role of classroom management efficacy in predicting teacher burnout. *International Journal of Human and Social Sciences*, 2(4), 256-262.
- Palacios, J. J. (2024). *An Associative Correlational Study of Principal Leadership Styles and Teacher Psychological Empowerment* (Doctoral dissertation, Grand Canyon University).

- Pandey, A. (2020). Level of burnout among teachers of public and private sector higher educational institutions using Maslach's burnout inventory educator's survey. *International Journal of Management*, 11(10), 1622-1631.
- Pandey, S., & Sayed, S. (2024). Burnout Among School Teachers in India: A Review of the Literature. *International Council for Education Research and Training*, Vol. 03, Issue 04, 308-320
- Parent-Thirion, A., Biletta, I., Cabrita, J., Vargas, O., Vermeulen, G., Wilczynska, A., & Wilkens, M. (2016). Sixth European working conditions survey: overview report.
- Patterson, K. J. (2024). *Transformational Leadership and Teacher Commitment: Examining Differences between Rural and Non-Rural Teachers* (Doctoral dissertation, Brigham Young University).
- Pieterse, A. N., Van Knippenberg, D., Schippers, M., & Stam, D. (2010). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of organisational behavior*, 31(4), 609-623.
- Pietsch, M., & Tulowitzki, P. (2017). Disentangling school leadership and its ties to instructional practices—An empirical comparison of various leadership styles. *School Effectiveness and School Improvement*, 28(4), 629–649. <https://doi.org/10.1080/09243453.2017.1363787>
- Pines, A. M., & Keinan, G. (2005). Stress and burnout: The significant difference. *Personality and Individual Differences*, 39(3), 625–635. <https://doi.org/10.1016/j.paid.2005.02.009>
- Piperac, P., Terzić-Supić, Z., Maksimović, A., Todorović, J., Karić, S., Soldatović, I., ... & Petričević, S. (2024). Burnout syndrome among preschool teachers in Serbia. *Arhiv za higijenu rada i toksikologiju*, 75(2), 116-124.

- Poddar, P. (2020, December 4). *Workplace bullying can be detrimental to employee productivity and wellbeing*. ETHRWorld / The Economic Times. <https://hr.economictimes.indiatimes.com/news/workplace-4-0/workplace-bullying-can-be-detrimental-to-employee-productivity-and-wellbeing/79564979>
- Pont, B., Nusche, D., & Moorman, H. (2008). *Improving School Leadership, Volume 1: Policy and Practice*. OECD Publishing. <https://doi.org/10.1787/9789264044715-en>
- Portelada, A., Candeias, A., & João, A. L. (2024). Teacher Well-Being Under Threat: The Consequences of Workplace Bullying from Preschool to Higher Education. *Education Sciences*, 14(11), 1175.
- Pradhan, M. (2014). Perspective of a teacher as nation builder. *Odisha Review*, 23–27. Retrieved from <https://magazines.odisha.gov.in/Orissareview/2014/Sept-Oct/engpdf/23-27.pdf>
- Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, 50(5), 325-327.
- Pressley, T., Marshall, D. T., & Moore, T. (2024). Understanding teacher burnout following COVID-19. *Teacher Development*, 28(4), 553-568.
- Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of vocational behavior*, 77(2), 168-185.
- R. Richards, K. A., Hemphill, M. A., & Templin, T. J. (2018). Personal and contextual factors related to teachers' experience with stress and burnout. *Teachers and Teaching*, 24(7), 768-787.
- RAND Corporation. (2024). Teachers experience nearly double the job-related stress compared to other professions. *RAND Education and Labor*. Retrieved from https://www.rand.org/pubs/research_reports/RRA1108-1.html

- Rastegar, A., Seif, M. H., Ardekani, Z. F., & Tajvaran, M. (2019). The relationship of transformational leadership style with bullying at work with regard to the mediating role of organisational health among employees of Shiraz university of medical sciences. *Payavard Salamat*, 13(4), 269-280.
- Rayner, C., & Hoel, H. (1997). A summary review of literature relating to workplace bullying. *Journal of community & applied social psychology*, 7(3), 181-191.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of statistical modeling and analytics*, 2(1), 21-33.
- Ren, L., & Kim, H. (2017). Effects of bullying experience on psychological well-being mediated by conflict management styles and psychological empowerment among nursing students in clinical placement: a structural equation modeling approach. *Journal of Korean Academy of Nursing*, 47(5), 700-711.
- Ribeiro, B. M. D. S. S., Martins, J. T., Moreira, A. A. O., Galdino, M. J. Q., Lourenço, M. D. C. F. H., & Dalri, R. D. C. D. M. B. (2022). Association between burnout syndrome and workplace violence in teachers. *Acta paulista de enfermagem*, 35, eAPE01902.
- Riley, D., Duncan, D. J., & Edwards, J. (2011). Staff bullying in Australian schools. *Journal of Educational Administration*, 49(1), 7-30.
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44(5), 635-674. <https://doi.org/10.1177/0013161X08321509>
- Rodríguez-Mantilla, J. M., & Fernández-Díaz, M. J. (2017). The effect of interpersonal relationships on burnout syndrome in Secondary Education teachers. *Psicothema*, 29(3), 370-377.

- Rodríguez-Munoz, A., Antino, M., Leon-Perez, J. M., & Ruiz-Zorrilla, P. (2022). Workplace bullying, emotional exhaustion, and partner social undermining: a weekly diary study. *Journal of Interpersonal Violence*, 37(5-6), NP3650-NP3666.
- Rowold, J. (2005). Multifactor leadership questionnaire. *Psychometric properties of the German translation by Jens Rowold*. Redwood City: Mind Garden.
- Sageer, I., & Qureshi, A. (2023). Psychological Empowerment and Employee Engagement in School Teachers. *Bulletin of Education and Research*, 45(3), 49-63.
- Sagnak, M. (2012). The empowering leadership and teachers' innovative behavior: The mediating role of innovation climate. *African Journal of Business Management*, 6(4), 1635-1641. <https://doi.org/10.5897/AJBM11.1939>
- Sakcak, O., Yildiz, A., & Uzun, S. (2021). An analysis of workplace mistreatment of teachers: A global review. *International Journal of Educational Research*, 103, 101607. <https://doi.org/10.1016/j.ijer.2021.101607>
- Salanova, M., Martínez, I. M., & Lorente, L. (2005). The job demands-resources model: Evidence from the health care sector. *Revista de Psicología del Trabajo y de las Organizaciones*, 21(1-2), 261-272.
- Salin, D. (2008). The prevention of workplace bullying as a question of human resource management: Measures adopted and underlying organisational factors. *Scandinavian Journal of Management*, 24(3), 221-231. <https://doi.org/10.1016/j.scaman.2008.04.004>
- Salin, D., & Hoel, H. (2013). Workplace bullying as a gendered phenomenon. *Journal of Managerial Psychology*, 28(3), 235-251
- Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organisation-level variables. *Teaching and Teacher Education*, 97, 103221.

- Santavirta, N., Solovieva, S., & Theorell, T. (2014). The association between job strain and emotional exhaustion in a cohort of 1,028 Finnish teachers. *British Journal of Educational Psychology*, 77(1), 213–228. <https://doi.org/10.1348/000709905X92045>
- Sauro, J., & Lewis, J. R. (2016). *Quantifying the user experience: Practical statistics for user research* (2nd ed.). Morgan Kaufmann.
- Sayadi, Y. (2016). The effect of dimensions of transformational, transactional, and non-leadership on the job satisfaction and organisational commitment of teachers in Iran. *Management in Education*, 30(2), 57–65. <https://doi.org/10.1177/0892020615625363>
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. CRC Press. <https://doi.org/10.1201/9781003062745>
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organisational Behavior*, 30(7), 893-917. <https://doi.org/10.1002/job.595>
- Schermuly, C. C., Creon, L., Gerlach, P., Graßmann, C., & Koch, J. (2022). Leadership styles and psychological empowerment: A meta-analysis. *Journal of Leadership & Organisational Studies*, 29(1), 73-95.
- Schleicher, A. (2011). Lessons from the world on effective teaching and learning environments. *Journal of Teacher Education*, 62(2), 202-221.
- Schonfeld, I. S., & Bianchi, R. (2017). Consequences of job stress for the mental health of teachers. In T. M. McIntyre, S. E. McIntyre, & D. J. Francis (Eds.), *Educator stress: An occupational health perspective* (pp. 55–75). Springer. https://doi.org/10.1007/978-3-319-53053-6_3

- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323–338. <https://doi.org/10.3200/JOER.99.6.323-338>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Social cognitive theory, self-efficacy, and students with disabilities. In M. L. Wehmeyer & K. A. Shogren (Eds.), *The Oxford handbook of self-determination theory* (pp. 55–71). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190843229.013.4>
- Schwab, R. L. (1983). Teacher burnout: Moving beyond "psychobabble." *Theory Into Practice*, 22(1), 21-26. <https://doi.org/10.1080/00405848309542901>
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organisations: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 981–1003. <https://doi.org/10.1037/a0022676>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- Shaked, H., Glanz, J., & Gross, Z. (2018). Gender differences in instructional leadership: how male and female principals perform their instructional leadership role. *School Leadership & Management*, 38(4), 417-434.
- Shimony, O., Malin, Y., Fogel-Grinvald, H., Gumpel, T. P., & Nahum, M. (2022). Understanding the factors affecting teachers' burnout during the COVID-19 pandemic: A cross-sectional study. *PLOS ONE*, 17(12), e0279383. <https://doi.org/10.1371/journal.pone.0279383>
- Silva, D. A. C. S., & Mendis, B. A. K. M. (2017). Male vs female leaders: Analysis of transformational, transactional & laissez-faire women leadership styles. *European Journal of Business and Management*, 9(9), 19-26.

- Singh, K., & Kaur, S. (2019). Psychological empowerment of teachers: development and validation of multi-dimensional scale. *Int J Recent Technol Eng*, 7(6), 340.
- Singh, Payal & Dwivedi, Tosendra. (2019). Comparative Study of Burnout and Coping Mechanism Among Private and Government School Teachers. 10.13140/RG.2.2.30620.05767. Retrieved from <https://www.researchgate.net/publication/377414508>
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99(3), 611-625. <https://doi.org/10.1037/0022-0663.99.3.611>
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(5), 1059-1069. <https://doi.org/10.1016/j.tate.2009.11.001>
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029–1038. <https://doi.org/10.1016/j.tate.2011.04.001>
- Skaalvik, E. M., & Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological reports*, 114(1), 68-77.
- Skaalvik, E. M., & Skaalvik, S. (2017). Dimensions of teacher burnout: Relations with potential stressors at school. *Social Psychology of Education*, 20, 775-790.
- Skaalvik, E. M., & Skaalvik, S. (2017). Teacher stress and teacher self-efficacy: Relations and consequences. *Educator stress: An occupational health perspective*, 101-125.

- Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of Occupational Health Psychology, 12*(1), 80-92. <https://doi.org/10.1037/1076-8998.12.1.80>
- Solomon, D. (2021). *Workplace bullying among teachers: A job demands-resources perspective* (Master's thesis, University of the Witwatersrand, Johannesburg (South Africa)).
- Somech, A. (2005). Teachers' personal and team empowerment and their relations to organisational outcomes: contradictory or compatible constructs? *Educational Administration Quarterly, 41*(2), 237-266.
- Song, C., Zhu, B., Xie, D., Lu, Z., & Wang, D. (2026). Research on the relationships among transformational leadership, job crafting and psychological empowerment of teachers in medical universities. *Scientific Reports*. <https://doi.org/10.1038/s41598-026-42797-1>
- Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss and Trauma, 12*(3), 259–280. <https://doi.org/10.1080/15325020701238093>
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal, 38*(5), 1442-1465
- Spreitzer, G. M. (2007). Taking stock: A review of more than twenty years of research on empowerment at work. In J. Barling & C. L. Cooper (Eds.), *Handbook of organisational behavior* (pp. 54-72). Sage Publications.
- Stengård, J., Mellner, C., Toivanen, S., & Nyberg, A. (2022). Gender differences in the work and home spheres for teachers, and longitudinal associations with depressive symptoms in a Swedish cohort. *Sex Roles, 1*-20.

- Stewart, J. (2006). Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. *Canadian Journal of Educational Administration and Policy*, 54(1), 1–29. <https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/42702>
- Stouten, J., Baillien, E., Van den Broeck, A., Camps, J., De Witte, H., & Euwema, M. (2010). Discouraging bullying: The role of ethical leadership and its effects on the work environment. *Journal of Business Ethics*, 95(1), 17–27. <https://doi.org/10.1007/s10551-011-0797-x>
- Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment*, 80(1), 99–103. https://doi.org/10.1207/S15327752JPA8001_18
- Sunbul, A. M. (2003). An analysis of relations among locus of control, burnout and job satisfaction in Turkish high school teachers. *Australian Journal of Education*, 47(1), 58-72.
- Tabachnik, D., & Fidell, J. (2012). Structural equation modeling: Guidelines for determining model fit. *J Bus Res Methods*, 6(5), 1-55.
- Taherdoost, H. (2017). Determining sample size; How to calculate survey sample size. *International Journal of Economics and Management Systems*, 2, 237-239.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- The Indian Express. (2020, November 5). *Safety, burnout, job stability key concerns of Indian employees during COVID: Report. The Indian Express.* <https://indianexpress.com/article/jobs/safety-burnout-job-stability-key-concerns-of-indian-employees-during-covid-6940843/>
- The New Indian Express. (2021, July 4). *The burnout epidemic among professionals and how to overcome it.*

<https://www.newindianexpress.com/magazine/2021/Jul/04/the-burnout-epidemic-among-professionals-and-how-to-overcome-it-2324129.html>

The Rules of Leadership Hiring. (2024, February 12). *Workplace Bullying in India: 5+ key reasons and empowering solutions*. Global Indian Network.
<https://globalindiannetwork.com/workplace-bullying-in-india/>

ThinkImpact. (2025). *51+ teacher burnout statistics*.
<https://www.thinkimpact.com/teacher-burnout-statistics/>

Thoonen, E. E., Slegers, P. J., Oort, F. J., Peetsma, T. T., & Geijssel, F. P. (2011). *How to improve teaching practices: The role of teacher motivation, organisational factors, and leadership practices*. *Educational administration quarterly*, 47(3), 496-536.

Tosunoglu, H., & Ekmekci, O. T. (2016). Laissez-faire leaders and organisations: How does laissez-faire leadership erode trust in organisations? *Journal of Economics, Finance and Accounting*, 3(1), 89–98.
<https://doi.org/10.17261/Pressacademia.2016116538>

Transformation & Development Department, Government of Assam, Directorate of Economics and Statistics. (2021). *Economic Survey Assam, 2020-21*.
https://des.assam.gov.in/sites/default/files/swf_utility_folder/departments/ecostat_medhassu_in_oid_3/this_comm/economic_survey_assam_2020-21_0.pdf

Tsang, K. K., Du, Y., & Teng, Y. (2022). Transformational leadership, teacher burnout, and psychological empowerment: A mediation analysis. *Social Behavior and Personality: an international journal*, 50(1), 1-11.

Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, 45(2), 217-247. <https://doi.org/10.1177/0013161X08330501>

Tummers, L. G., & Bakker, A. B. (2021). Leadership and Job Demands-Resources Theory: A Systematic Review. *Frontiers in psychology*, 12.

- U.S. House of Representatives (2019). Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students. Hearing before the Committee on Education and Labor, One Hundred Sixteenth Congress, First Session, Serial Number 116-3
- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly*, 17(6), 654–676. <https://doi.org/10.1016/j.leaqua.2006.10.007>
- UNESCO, & Teacher Task Force. (2025). *Global report on teachers: Addressing teacher shortages and transforming the profession*. UNESCO. <https://www.unesco.org/en/articles/global-report-teachers-addressing-teacher-shortages-and-transforming-profession>
- UNISON.(2013). *Tackling bullying at work*. <https://www.unison.org.uk/content/uploads/2013/07/On-line-Catalogue216953.pdf>
- United Nations Educational, Scientific and Cultural Organisation. (2021). *School violence and bullying: Global status report*. UNESCO. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000246970>
- United Nations Educational, Scientific and Cultural Organisation. (2021). *Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. UNESCO. <https://www.unesco.org/en/sustainable-development-goals/education>
- United Nations Educational, Scientific and Cultural Organisation. (2022). *Improving teacher education and professional development globally*. UNESCO. <https://core.unesco.org/en/project/2210151021>
- Uppal, S. (2005). Disability, workplace characteristics and job satisfaction. *International Journal of Manpower*, 26(4), 336–349. <https://doi.org/10.1108/01437720510609589>

- Urlick, A. (2016). Examining US principal perception of multiple leadership styles used to practice shared instructional leadership. *Journal of Educational Administration*, 54(2), 152–172. <https://doi.org/10.1108/JEA-07-2014-0088>
- Uslukaya, A. (2025). Can teacher ostracism be prevented? Exploring how empowering leadership can mitigate teacher ostracism through work engagement. *British Journal of Educational Psychology*, 95(2), 663-682.
- Van den Broeck, A., Baillien, E., & De Witte, H. (2011). Workplace bullying: A perspective from the Job Demands-Resources model. *SA Journal of Industrial Psychology*, 37(2), 1-12.
- Van der Zanden, P. J., Denessen, E., Cillessen, A. H., & Meijer, P. C. (2020). Fostering critical thinking skills in secondary education to prepare students for university: teacher perceptions and practices. *Research in Post-Compulsory Education*, 25(4), 394-419.
- Vecchio, R. P., Justin, J. E., & Pearce, C. L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *Leadership Quarterly*, 21(3), 530-542. <https://doi.org/10.1016/j.leaqua.2010.03.014>
- Verma, J. (2016). *Effectiveness of educational leadership in relation to gender and style: An explorative study* [Abstract]. National Council of Educational Research and Training (NCERT), Office of Secondary Research in Education (OSRE).
- Verma, J. (2017). Gender dynamics and perceptions of school teachers towards leadership effectiveness of their school principals: A study. *ZENITH International Journal of Multidisciplinary Research*, 7(7), 9-15.
- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American Psychologist*, 62(1), 17–24. <https://doi.org/10.1037/0003-066X.62.1.17>

- Walker, J. (2024, August 21). *How to stand up to office bullies: Your survival guide*. Forbes. <https://www.forbes.com/sites/jasonwalker/2024/08/21/how-to-stand-up-to-office-bullies-your-survival-guide/>
- Wan, E. (2005). Teacher empowerment: Concepts, implications, and strategies for practice. *Journal of Educational Administration*, 43(3), 253-277. <https://doi.org/10.1108/09578230510594853>
- WANG, F., & LI, F. The Generation and Maintenance of Workplace Bullying among Teachers in Chinese Private Universities: A Constructivist Grounded Theory Study. In *Frontiers in Education* (Vol. 11, p. 1773315). Frontiers. <https://doi.org/10.3389/feduc.2026.1773315>
- Whitehead, A., Ryba, K., & O'Driscoll, M. (2000). Burnout among New Zealand primary school teachers. *New Zealand Journal of Psychology*, 29(2), 52-52.
- Whitehead, A., Ryba, K., & O'Driscoll, M. (2000). Burnout among New Zealand primary school teachers. *New Zealand Journal of Psychology*, 29(2), 52-52.
- Whittaker, T. A., & Schumacker, R. E. (2022). *A beginner's guide to structural equation modeling*. Routledge.
- Williams, L. L. (2023). *Quantitative Analysis of the Relationship Between Workplace Bullying and Burnout Among Employees in Higher Education* (Doctoral dissertation, Keiser University).
- Wood, R. E., & McCarthy, P. M. (2002). Understanding the happiness quotient: A study of life satisfaction. *Journal of Applied Psychology*, 87(4), 758-771. <https://doi.org/10.1037/0021-9010.87.4.758>
- World Health Organisation. (2004). *Promoting mental health: Concepts, emerging evidence, practice* (Summary Report). WHO. <https://www.who.int/publications/i/item/9241562943>

- World Health Organisation. (2019). *Burn-out an "occupational phenomenon": International Classification of Diseases*. Retrieved from <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>
- World Health Organisation. (2021). Mental health and psychosocial well-being in the workplace. World Health Organisation. Retrieved from <https://www.who.int/publications/i/item/9789240064751>
- World Health Organisation. (2023). *Stress*. <https://www.who.int/news-room/questions-and-answers/item/stress>
- Worth, J., & Van den Brande, J. (2019). *Teacher Labour Market in England: Annual Report 2019*. National Foundation for Educational Research. <https://www.nfer.ac.uk/publications/teacher-labour-market-in-england-annual-report-2019/>
- Wunnenberg, M. (2020). Psychosocial bullying among nurse educators: exploring coping strategies and intent to leave. *Journal of nursing scholarship*, 52(5), 574-582.
- Xenikou, A. (2017). Transformational leadership, transactional contingent reward, and organisational identification: The mediating effect of perceived innovation and goal culture orientations. *Frontiers in Psychology*, 8, 1754. <https://doi.org/10.3389/fpsyg.2017.01754>
- Yadav, R. S., Dash, S. S., Sinha, S., & Patky, J. (2020). Impact of Work-Place Bullying on Turnover Intention: A Study among Indian School Teachers. *South Asian Journal of Management*, 27(4).
- Yap, B. W., & Sim, C. H. (2011). Comparisons of various types of normality tests. *Journal of Statistical Computation and Simulation*, 81(12), 2141-2155.

- Yapici, M., Toprak, M., & Boran, A. I. (2011). The impact of leadership styles on employee well-being: A study of workplace bullying and job satisfaction. *International Journal of Workplace Health*, 26(2), 112-130.
- Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12(2), 237–268. [https://doi.org/10.1016/S1053-4822\(02\)00048-7](https://doi.org/10.1016/S1053-4822(02)00048-7)
- Zapf, D., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European Journal of Work and Organisational Psychology*, 10(4), 497–522. <https://doi.org/10.1080/13594320143000834>
- Zembylas, M., & Papanastasiou, E. C. (2005). Modeling teacher empowerment: The role of job satisfaction. *Educational Research and Evaluation*, 11(5), 433–459. <https://doi.org/10.1080/13803610500146152>
- Zhang, Y., Wang, M., & Shi, J. (2022). The impact of principal leadership on teacher burnout: A moderated mediation model. *Educational Management Administration & Leadership*, 50(3), 375–393. <https://doi.org/10.1177/1741143220935454>

APPENDICES

1. Teachers' perception of their school principal leadership style questionnaire by Uri Even & Iris Ben David-Hadar
2. Copenhagen Burnout Inventory by Tage S. Kristensen, Marianne Borritz, Ebba Villadsen, and Karl B. Christensen
3. Negative Acts Questionnaire-Revised by Stale Einarsen, Helge Hoel, and Guy Notelaers
4. Psychological Empowerment Scale by Gretchen M. Spreitzer

Teachers' perception of their school principal leadership style questionnaire

This questionnaire is intended to provide a description of leadership patterns. The following are sentences that describe your school principal. We would like to assess, with respect to each sentence, how often a school principal engages in the behaviour described.

Rate for each sentence from 1-5 using the scale shown below:

1- Never

2- Seldom

3- Occasionally

4- Often

5- Always

Question No.	Question	Rank				
1.	Assists me in return for my efforts	1	2	3	4	5
2.	Avoid interfering when important issues arise	1	2	3	4	5
3.	He is not there when he is needed	1	2	3	4	5
4.	It makes me proud to be in touch with him	1	2	3	4	5
5.	Indicates the importance of having a strong sense of purpose	1	2	3	4	5
6.	Behaves in ways that build my appreciation for him	1	2	3	4	5
7.	Avoid making decisions	1	2	3	4	5
8.	Treats each of us as an individual with different needs, abilities and aspirations than others	1	2	3	4	5
9.	Helps me develop my strengths	1	2	3	4	5
10.	Works with me satisfactorily	1	2	3	4	5
11.	His actions amplify his power	1	2	3	4	5

Copenhagen Burnout Inventory

NB: The questions of the CBI should not be printed in the questionnaire in the same order as shown here. In fact, the questions could very well be mixed with questions on other topics. This is recommended in order to avoid stereotyped response patterns.

Part one: Personal burnout.

Definition: Personal burnout is a state of prolonged physical and psychological exhaustion.

Questions:

1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: "I can't take it anymore"?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Response categories: Always, Often, Sometimes, Seldom, Never/almost never.

Scoring: Always: 100. Often: 75. Sometimes: 50. Seldom: 25.
Never/almost never: 0. Total score on the scale is the average of the scores on the items.

If less than three questions have been answered, the respondent is classified as non-responder.

Part two: Work burnout.

Definition: Work burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work.

Questions:

1. Is your work emotionally exhausting?
2. Do you feel burnt out because of your work?
3. Does your work frustrate you?
4. Do you feel worn out at the end of the working day?
5. Are you exhausted in the morning at the thought of another day at work?
6. Do you feel that every working hour is tiring for you?
7. Do you have enough energy for family and friends during leisure time?

Response categories:

Three first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low degree.

Last four questions: Always, Often, Sometimes, Seldom, Never/almost never. (Reversed score for last question).

Scoring as for the first scale. If less than four questions have been answered, the respondent is classified as non-responder.

Part three: Client burnout.

Definition: Client burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work with clients*.

*Clients can be: patients, students, children, inmates, or other kinds of recipients.

1. Do you find it hard to work with clients?
2. Do you find it frustrating to work with clients?
3. Does it drain your energy to work with clients?
4. Do you feel that you give more than you get back when you work with clients?
5. Are you tired of working with clients?
6. Do you sometimes wonder how long you will be able to continue working with clients?

Response categories:

The four first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low degree.

The two last questions: Always, Often, Sometimes, Seldom, Never/almost never.

Scoring as for the first two scales. If less than three questions have been answered, the respondent is classified as non-responder.

NB: In these questions one should use the appropriate term for "clients" depending on the circumstances. E.g., in a questionnaire for nurses, the term patients should be used, while the term children or students should be used in a study of teachers' burnout.

Negative Acts Questionnaire-R

The following behaviours are often seen as examples of negative behaviour in the workplace. Over the last six months, how often have you been subjected to the following negative acts at work?

Please circle the number that best corresponds with your experience over the last six months:

	1 Never	2 Now and then	3 Monthly	4 Weekly	5 Daily
1) Someone withholding information which affects your performance	1	2	3	4	5
2) Being humiliated or ridiculed in connection with your work	1	2	3	4	5
3) Being ordered to do work below your level of competence	1	2	3	4	5
4) Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	1	2	3	4	5
5) Spreading of gossip and rumours about you	1	2	3	4	5
6) Being ignored or excluded (being 'sent to Coventry')	1	2	3	4	5
7) Having insulting or offensive remarks made about your person (i.e., habits and background), your attitudes or your private life	1	2	3	4	5
8) Being shouted at or being the target of spontaneous anger (or rage)	1	2	3	4	5
9) Intimidating behaviour such as finger-pointing, invasion of personal space, shoving, blocking/barring the way	1	2	3	4	5
10) Hints or signals from others that you should quit your job	1	2	3	4	5
11) Repeated reminders of your errors or mistakes	1	2	3	4	5
12) Being ignored or facing a hostile reaction when you approach	1	2	3	4	5
13) Persistent criticism of your work and effort	1	2	3	4	5
14) Having your opinions and views ignored	1	2	3	4	5
15) Practical jokes carried out by people you don't get on with	1	2	3	4	5
16) Being given tasks with unreasonable or impossible targets or deadlines	1	2	3	4	5
17) Having allegations made against you	1	2	3	4	5

18) Excessive monitoring of your work	1	2	3	4	5
19) Pressure not to claim something which by right you are entitled to (e.g. sick leave, holiday entitlement, travel expenses)	1	2	3	4	5
20) Being the subject of excessive teasing and sarcasm	1	2	3	4	5
21) Being exposed to an unmanageable workload	1	2	3	4	5
22) Threats of violence or physical abuse or actual abuse	1	2	3	4	5

23. Have you been bullied at work? We define bullying as a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions. We will not refer to a one-off incident as bullying.

Using the above definition, please state whether you have been bullied at work over the last six months?

- No (continue at question ?) ☐
- Yes, but only rarely ☐
- Yes, now and then ☐
- Yes several times per week ☐
- Yes, almost daily ☐

Psychological Empowerment Scale

Listed below are a number of self-orientations that people may have with regard to their work role. Using the following scale, please indicate the extent to which you agree or disagree that each one describes your self-orientation.

A. Very Strongly Disagree		E. Agree
B. Strongly Disagree	D. Neutral	F. Strongly Agree
C. Disagree		G. Very Strongly Agree

	Statements
1	I am confident about my ability to do my job.
2	The work that I do is important to me.
3	I have significant autonomy in determining how I do my job.
4	My impact on what happens in my department is large.
5	My job activities are personally meaningful to me.
6	I have a great deal of control over what happens in my department.
7	I can decide on my own how to go about doing my own work.
8	I have considerable opportunity for independence and freedom in how I do my job.
9	I have mastered the skills necessary for my job.
10	The work I do is meaningful to me.
11	I have significant influence over what happens in my department.
12	I am self-assured about my capabilities to perform my work activities.