

**PERSONALITY HARDINESS, ANOMIE AND CONTEXTUAL  
INFLUENCES AS PREDICTORS OF ACADEMIC  
DISHONESTY: A MULTICAMPUS INVESTIGATION**

A

Thesis

Submitted to



For the award of

**DOCTOR OF PHILOSOPHY (Ph.D.)**

**in**

**EDUCATION**

**By**

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**LOVELY PROFESSIONAL UNIVERSITY**

**PUNJAB**

**2019**

## DECLARATION

I, Hilal Bashir hereby declare that the thesis entitled *Personality Hardiness, Anomie and Contextual Influences as predictors of Academic Dishonesty: A Multicampus Investigation*, submitted to Lovely Professional University for the award of Degree Doctor of Philosophy in Education, is my original research work and has been prepared by me in School of Education at Lovely Professional University under the supervision of Dr. Kundan Singh, Assistant Professor, Lovely Professional University. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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## CERTIFICATE

I certify that **Hilal Bashir** has prepared his thesis entitled, “*Personality Hardiness, Anomie and Contextual Influences as predictors of Academic Dishonesty: A Multicampus Investigation*” for the award of Ph.D. degree of the Lovely Professional University, under my guidance. He has carried out the work at the School of Education, Lovely Professional University, Phagwara, Punjab.

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## ABSTRACT

*Academic dishonesty is a multifaceted and ubiquitous global phenomenon. It has been considered an imperative research problem. The consequence of academic dishonesty has been long-lasting in many occurrences and its impediment for development is largely alarming. In campuses academically dishonest practices occur regularly and thus create an enormous problem because at this stage undergraduate students are far from home and gain new ideas, experiences, and peers in the novel environment. Therefore, the understanding of the causes that affect students' decisions to involve in high frequency of academic dishonesty is important for academic institutions, in order to reduce its occurrence. So, present investigation attempts to provide a theoretical base to the academic community in order to promote ethical culture and develop strategies for controlling the phenomenon and generating an effective environment of academic integrity. Indeed, various contextual, psychological and individual constructs has been explored but little understanding is existing concerning with psycho-social domains. The construct of anomie (psycho-social variable) as linked to academic dishonesty has been studied far less and provided the foundation for the current research problem. However, the concept of anomie has been great concern to program formulators. So, little investigation has been done to classify influence of anomie on student performance of dishonest academic practices. On the other hand, the construct personality hardiness, a personality style, and a set of beliefs about self and the world has been examined far less in relation to academic dishonesty of students, has been addressed. Moreover, studies of the relationship between personality hardiness, anomie and contextual influences with academic dishonesty are largely absent from the academic dishonesty literature. Therefore, the present study was taken up to investigate into academic dishonesty in relation to independent variables chosen from individualistic and social domain i.e. personality hardiness, anomie and contextual influences of undergraduate students.*

*The objectives of the present study were, to explore the levels of personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students; to find out differences on personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students on the basis of gender, age, socio-economic-status and region of college campuses; to examine the*

*relationship of personality hardiness, anomie and contextual influences with academic dishonesty of undergraduate students, to examine the personality hardiness, anomie and contextual influences as predictors of academic dishonesty of undergraduate students, and to determine the contribution of various dimensions of personality hardiness, anomie and contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students. In fact, it is the comprehensive process of testing the hypotheses and examining the obtained data. Although there are a number of research designs, the present study is based on descriptive research design.*

*The present study was conducted on 1170 undergraduate students selected from eighteen college campuses of Jammu and Kashmir. Data was collected by employing stratified sampling technique. The data gathering tools used in this study comprised of four separate survey instruments: Academic dishonesty scale (self-developed and validated) contains 23-items based on six dimensions i.e. cheating in examination, plagiarism, outside help, prior cheating, falsification, and lying about academic assignments. On the other hand, anomie scale (self-developed and validated) contains 21-items based on three dimensions i.e. meaninglessness, distrust and moral decline. Also, contextual influences scale (self-developed and validated) contains 69-items based on three dimensions i.e. peer influence, parental influence and institutional climate. In addition, personality hardiness scale developed and validated by Nowack (1990) contains 30-items based on three dimensions i.e. control, commitment and challenge was used for the purpose of data collection. The data was analyzed by applying descriptive and inferential statistical techniques such as mean, standard deviation, percentage, Pearson's coefficient of correlation, three-way analysis of variance (ANOVA), t-test, multiple and step-wise regression analysis.*

*The results of the study are: percentage-wise distribution on different levels of academic dishonesty shows that the highest percentage of undergraduate students fall within average level followed by above average, below average and low level of academic dishonesty respectively. In case of dimension and percentage-wise distribution of academic dishonesty showed that majority of undergraduate students reported average level of cheating in examination, plagiarism, outside help, prior cheating, falsification and lying about academic assignments. In case of anomie, the observation of the results suggest that highest percentage of the sample reported in*

average level followed by above average, below average, high and low level of anomie. Domain and percentage-wise distribution of anomie showed that majority of undergraduate students fall in average level of meaninglessness, distrust and moral decline respectively. For personality hardiness, highest percentage of the undergraduate students were in average level followed by above average, below average, low and high level of personality hardiness respectively. In case of dimension and percentage-wise distribution of personality hardiness shows that majority of undergraduate students fall in average level of control, commitment and challenge. For contextual influences, highest percentage of undergraduate students was in below average level of contextual influences. In case of dimension and percentage-wise distribution of contextual influences, undergraduate students fall in below average level of peer influence whereas undergraduate students perceive extreme low level of parental influence and most students perceive average level of institutional climate.

Results revealed that undergraduate male and female students differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Male students are more involved in dishonest academic practices as compared to their female counterparts. On the basis of age, undergraduate students differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Younger students are more engaged in academically dishonest practices as compared to their older counterparts. Undergraduate students from low and high socio-economic-status families differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Undergraduate students from low socio-economic-status are more engaged in dishonest academic practices as compared to students from high socio-economic-status.

Male and female undergraduate students differ significantly on meaninglessness, distrust, moral decline and total anomie. Female students perceive more anomie as compared to their male counterparts. On the basis of age, undergraduate students differ significantly on meaninglessness, distrust, moral decline and total anomie. Younger students perceive more anomie as compared to

*their older counterparts. Students from low and high socio-economic-status families differ significantly on meaninglessness and total anomie. Students from low socio-economic-status perceive more anomie as compared to their high socio-economic-status counterparts.*

*Male and female undergraduate students differ significantly on control, challenge and total personality hardiness. Male students have more cognitive appraisal and self-control beliefs as compared to their female counterparts. On the basis of age, undergraduate students differ significantly on control, commitment, challenge and total personality hardiness. Older students have higher personality hardiness traits as compared to their younger counterparts. Undergraduate students from low and high socio-economic-status families didn't differ significantly on control, commitment, challenge and total personality hardiness. Male and female undergraduate students differ significantly on institutional climate whereas peer influence, parental influence, and total contextual influence didn't differ significantly. On the basis of age, undergraduate students differ significantly on peer influence, parental influence, institutional climate and total contextual influences. It implies that younger students are more influenced by the behaviour of contextual persons as compared to their older counterparts. Low and high socio-economic-status undergraduate students differ significantly on peer influence, parental influence, institutional climate and total contextual influence. Undergraduate students from low socio-economic-status perceive more peer, parental, institutional and total contextual influences as compared to students from high socio-economic-status.*

*The observation of the results suggest that a significant difference was found in academically dishonest practices among students of different regions of Jammu and Kashmir. The result of the study exposed that students from different areas tend to have diverse attitudes toward academic dishonesty. On the other hand, there exists significant difference among students of different regions of Jammu and Kashmir in their anomie. The undergraduate students perceive more anomie in some areas are due to low habitual patterns of behavior, emotion and thought of people that separate an individual from others. While as significant difference exists among groups in personality hardiness on the basis of region of college campuses. Moreover, results indicated that students from different regions of Jammu and Kashmir differ significantly in their contextual influences.*

*Positive and significant correlation was found between anomie and academic dishonesty of undergraduate students. Personality hardiness is significantly and negatively correlated with academic dishonesty of undergraduate students. The relationship among peer influence, parental influence, institutional climate and total contextual influence with various dimensions and total academic dishonesty was found significantly positive. On the other hand, multiple regression analysis indicated that all predictors i.e. anomie, personality hardiness and contextual influences had a statistically significant contribution to academic dishonesty of undergraduate students.*

*On the basis of step-wise regression analysis, moral decline, distrust and meaninglessness was found significant predictors of academic dishonesty. Moral decline was found most robust predictor of academic dishonesty of undergraduate students. After moral decline, distrust emerged as the second and meaninglessness emerged as the third important predictor of academic dishonesty. So, anomie feeling of students would develop elements like anxiety-isolation-purposelessness in contemporary civilized society as it is for the intrinsic insecurity of a social life. Similarly, control, commitment and challenge were found significant predictors of academic dishonesty. The most important predictor of academic dishonesty was control dimension of personality hardiness. After control, commitment emerged as the second and challenge emerged as the third important predictor of academic dishonesty of undergraduate students. Moreover, peer influence, parental influence and institutional climate was found significant predictors of academic dishonesty. Peer influence was found robust predictor of academic dishonesty undergraduate students. After peer influence, parental influence emerged as second and institutional climate as the third predictor of academic dishonesty of undergraduate students. This multicampus investigation provides insights into nature and frequency of academic dishonesty, with preliminary emphasis on colleges of Jammu and Kashmir. This study provides multi-faceted, hybrid approaches, strategies and appropriate tools, procedures, policies and best practices for controlling the problem and generating an effective environment of integrity.*

**Keywords:** *Academic dishonesty, Personality hardiness, Anomie, Contextual influences, Undergraduate students.*



## **ACKNOWLEDGEMENT**

All praise and thanks are due to THE ALMIGHTY ALLAHA, and peace and blessings be upon His Messenger. We implore Allah Almighty to help us serve His cause and render our work for His Sake.

It is my proud privilege to express my heartfelt gratitude to my esteemed supervisor Dr. Kundan Singh, Assistant Professor, School of Education, Lovely Professional University for his convivial association, sagacious guidance, and remarkable suggestions during the course of my research program. His dedicated supervision, critical appraisals and unstinted cooperation not only facilitated my work but also enriched it.

A special thanks and appreciation goes to my favorite teacher Dr. Ranjan Bala, Ex-assistant Professor, School of Education, Lovely Professional University, for her continuous support and assistance during development of research instruments and data analysis. Thank you so much for your input, suggestions, feedback, discussions and guidance in completing this research. The journey of research would have been difficult and lonelier without this noble soul.

I wish to express my deep and sincere gratitude to Dr. Ramandeep Kaur, Ex-assistant Professor, School of Education, Lovely Professional University, for her guidance, inspiration and motivation in carrying out my research project. It is because of her support that I could synchronize the efforts in covering manifold features of research work undertaken.

I owe a special debt of gratitude in this regard to Dr. Vijay Kumar Chechi, HOD, school of education, Lovely Professional University, for his guidance, inspiration, invaluable insight, constant reassurance, motivation and for providing necessary facilities in carrying out my research project. Without his assistance I never would have been able to reach this milestone in my life.

I extend my deepest gratitude to Professor Sanjay Modi, Executive Dean and Professor P.P. Singh, Head of School for providing me the platform to conduct my research work smoothly. Professor P. P. Singh has been most supportive and his constant and constructive feedback during annual seminars helped me to enhance the quality of my research.

A note of special thanks to Dr. Nimisha Beri, Associate professor, School of Education, Lovely Professional University, for her continuous support and constructive feedback during annual seminars helped me to improve the quality of my research. Thank you so much for your suggestions, advice and guidance in completing this research.

Heartfelt gratitude to the esteemed faculty members of the School of Education, Lovely Professional University, Mr. Harish Mittu, Mr. Dinesh Kumar, Dr. Anshu Narad, and Ms. Kamal Preet Kaur for their kind cooperation at all the times.

I am highly indebted to all the faculty members, library staff and other people belonging to Lovely Faculty of Education for their cordial support, valuable information and guidance, which helped me in completing this task through various stages.

My Loving thanks goes to my father Bashir Ahmad Chak, mother Hasina Akhter and my brothers Shabir Ahmad Chak, Sajad Ahmad Chak, and Maqsood Bashir for their assistance, understanding, constant inspiration, encouragement and blessings which are the most essential ingredients necessary for the accomplishment of this great task; I thank them.

I express my deep sense of regard and special indebtedness to my friend Ms. Saima Majeed who supported, assisted and encouraged me in every possible way throughout the research work. Her true involvement with a critical approach enabled me in overcoming many anticipated and unanticipated difficulties in research and personal life.

I must also acknowledge with thanks the help and cooperation extended to me by the students, teachers, and Principals of the Government degree colleges in, which data collection was carried out.

Once more, I say thank you all, and may God Almighty bless all of you abundantly.

Dated.....

Hilal Bashir  
Investigator

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## ACRONYMS DESCRIPTION

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<b>AD</b>	Academic Dishonesty
<b>TPB</b>	Theory of Planned Behavior
<b>SCCT</b>	Social cognitive career theory
<b>ADS</b>	Academic Dishonesty Scale
<b>AS</b>	Anomie Scale
<b>CIS</b>	Contextual Influences Scale
<b>PHS</b>	Personality Hardiness Scale
<b>CVRs</b>	Content Validity Ratios
<b>KMO</b>	Kaiser-Meyer-Olkin
<b>DF</b>	Degree of Freedom
<b>CE</b>	Cheating in Examination
<b>PL</b>	Plagiarism
<b>OH</b>	Outside Help
<b>PC</b>	Prior Cheating
<b>LY</b>	Lying about Academic Assignments
<b>EFA</b>	Exploratory Factor Analysis
<b>CFA</b>	Confirmatory Factor Analysis
<b>GFI</b>	Goodness Fit Index
<b>AGFI</b>	Adjusted Goodness of Fit Index
<b>CFI</b>	Comparative Fit Index
<b>RMSA</b>	Root Mean Square of Approximation
<b>TAD</b>	Total Academic Dishonesty
<b>CR</b>	Construct reliability
<b>AVE</b>	average variance extracted
<b>SIC</b>	Squared Inter construct correlation
<b>ML</b>	Meaninglessness
<b>DT</b>	Distrust
<b>MD</b>	Moral Decline
<b>SES</b>	Socio-economic-status
<b>ANOVA</b>	Analysis of Variance
<b>M</b>	Mean
<b>MSS</b>	Mean Sum of Square
<b>N</b>	Number of individuals
<b>R</b>	Coefficient of Correlation
<b>SD</b>	Standard Deviation
<b>SS</b>	Sums of Square

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## **LIST OF APPENDICES**

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## CHAPTER I

### THEORETICAL ORIENTATION OF THE PROBLEM

With growing concern about eroding of moral values in contemporary societies in general and in particular within our educational system, the dilemma of academic dishonesty in higher education continues to receive substantial attention. Obviously, it is the educational community that becomes the focal point of attention. The negative impact that academic dishonesty has had on the culture and values of higher education, it also has had an impact on the values of society as a whole. Fundamental to the mission of higher education is inculcating ethical values in its graduates (Kibler & Kibler, 1993); unfortunately, academically dishonest practices threaten this mission by undermining the value of education (Gallant, 2008). It has been stated that academically dishonest behavior is pervasive through the academic community, it may be more indicative of a defective educational organization than a student's character (Kohn, 2007).

Due to changes in the society, educational community and technologies over time appear to offer escalating accessibilities and lure to cheat, yet the academic organizations have not counteracted that with an improved importance on teaching students about ethics and ethical behavior (Gallant, 2010). Pervasive student academic dishonesty can confront the worth of the academia degree and cast public distrust on the validity of teaching and evaluation methods (Gallant & Drinan, 2008). In educational community ethical issues are eroding due to competition of today's job aspiration and the ideas of winning at any price and created scandals such as forging documents, trading credentials, deceiving and cheating. This menace could undermine the excellence of education as well as the vision of grooming honest, accountable and trustworthy professionals in the future (Naghdipour & Emeagwali, 2013). Several studies reported that students, who engaged in academic dishonesty, were more probably to engage in workplace dishonesty (Ellahi, Mushtaq & Khan, 2013; Harding, Carpenter, Finelli, & Passow, 2004; Nazir & Aslam, 2010; Nonis & Swift, 2010; Rujoiu & Rujoiu, 2014; Sims, 1993). Therefore, the understanding of the causes that affect student's decisions to involve in high frequency of academic dishonesty is important for academic institutions, in order to reduce its occurrence.

Academic dishonesty has long been considered an imperative research problem (Whitley & Keith-Spiegel, 2001). To understand this multifaceted problem, researchers have recognized numerous facets that seem to be related with student performance of dishonest academic acts. So, present investigation attempts to provide a theoretical and practical based program to the academic community in order to promote ethical culture and develop strategies for controlling the phenomenon and generating an effective environment of academic integrity.

## **1.1 ACADEMIC DISHONESTY**

Academic dishonesty is a multifaceted and pervasive global phenomenon (Alleyne & Phillips, 2011; Bashir & Bala, 2018a; Bashir & Singh, 2018; Imran & Nordin, 2013; Iberahim, Hussein, Samat, Noordin, & Daud, 2013; McCabe & Trevino, 1996; Nazir & Aslam, 2010; Thomas, 2017; Tadesse & Getachew, 2010; Saidin & Isa, 2013; Whitley, 1998; Yang, Huang & Chen, 2013). The concern of academic dishonesty has been long-lasting and catastrophic in many occurrences and its interference for impediment is largely alarming (Tadesse & Getachew, 2010). In universities, academically dishonest practices occur repeatedly and thus creates a gigantic dilemma (Whitley, 1998) because at this stage students are far from home and gain new ideas, experience and peers in the novel milieu (Nonis & Swift, 2010).

Academic dishonesty on scholarly work comprises a varied collection of psychological phenomena, containing development, learning and motivation. These phenomena create the hub of the field of educational psychology. From the context of learning, an academically dishonest behavior is an approach that serves as a cognitive shortcut. Whereas effective learning often comprises the usage of complex cognitive and self-regulatory strategies, academic dishonesty precludes the requirement to use such approaches. Thus, students may prefer to dishonest academic practices either because they do not know how to use flourishing learning procedures or merely because they do not want to devote the adequate time in spending such fruitful techniques. From a developmental context, student performance of dishonest academic acts may happen in diverse qualities and quantities depending on individual's levels of cognitive, social and moral development. From a motivational viewpoint, learners report many different reasons for engaging in dishonest activities (Murdock & Anderman, 2007). Some students perform cheating practices because they are extremely focused on grades; others cheat because they are anxious with

retaining a certain image to themselves or to their friends; still others cheat because they lack the necessary self-efficacy to employ in difficult tasks or because of the categories of attributions they have increased. Singh (1984, as cited in Teferra, 2001) regrets that, the excellence of those who completed college and university education has been far from meticulous and when they become school or college teachers, they bring the same principles of work and values of performance to stand upon their execution that they encountered as students.

A penetrating analysis suggests that academic dishonesty can be viewed from a number of theoretical and disciplinary perspectives. Indeed, it has been operationalized and conceptualized from the lens of education (Bashir & Bala, 2018; Bashir & Singh, 2018; Cizek, 1999; Kaur, 2011; Kant, 2016), philosophy (Green, 2004) sociology (Black, 1962) and economics (Kerkvliet, 1994). Whereas each of these vantages offer something in conditions of conceptualizing how and why academic dishonesty occurs, in the final analysis, when persons involve in any kind of dishonest academic practices, they are constructing the judgment to involve in that practice. This choice which occurs within the mind of the person is innately psychological in nature (Murdock & Anderman, 2007).

### **1.1.1 Meaning and Definition of Academic Dishonesty**

Academic dishonesty has diverse meanings across the educational community (Gallant, 2008; Kibler, 1992). These connotations address academic dishonesty, academic integrity and academic honesty. However, academic dishonesty is used as an umbrella term (Walton, 2010) that refers to behaviors that “result in students giving or receiving illicit assistance in an academic exercise or receiving credit for work which is not their own” (Nuss, 1984).

Academic dishonesty, as an unacceptable attribute, is used as the term contrasting academic integrity, which is an acceptable attribute (Gallant, 2006). The term academic cheating is used rarely in this study. In fact, academic cheating is used as a synonym for academic dishonesty (Cizek, 1999; McCabe, 1993). Conversely, academic integrity is complex to operationalize due to many meanings and explanations (Gallant, 2006). On the other hand, academic dishonesty is the clear antonym for academic honesty (Gallant, 2006); most investigators do not employ the construct academic honesty, instead opting to use academic dishonesty in academia.

According to Gehring and Pavela (1994), academic dishonesty is “an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization or uses unauthorized materials or fabricated information in any academic exercise”. Similarly, Ikupa (1997, as cited in Küçüktepe, 2011), defined academic dishonesty as an “illegal and unethical behaviours that individual displays during testing of his/her knowledge and ability”. Therefore, academic dishonesty encompassing behaviours such as malpractices in examination, prior cheating, stealing question papers from examination hall, false excuses, using prohibited things, interchange allotted answer book/question paper, showing physical or verbal violent behaviours to persons applying the examination and acting as a different individual in the way of breaking out the guidelines of examination. Linda Krueger (2014) added that “academic dishonesty includes the misrepresentation of knowledge, of work produced or of skills performed as authentic by the student in an educational setting”. In addition, “Academic dishonesty refers to misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the falsification of information” (Sikkim Manipal University, 2016).

Relying on the widely recognized definitions of academic dishonesty in the literature and specifically, academic dishonesty is conceptualized as cheating or plagiarism that gives a learner an illicit advantage during an assessment or assignment (Bleeker, 2008). Academic dishonesty can be further conceptualized as “social-active, independent-planned and social-passive. Independent-planned dishonesty is that when learners using individually formed things during an assessment such as crib/hidden notes. On the other hand, social-active dishonesty is copying the response of another learner without the familiarity of that learner. Social-passive dishonesty is that when one learner permitting another learner to copy an answer without objection (Garavalia, Olson, Russell, & Christensen, 2007). Moreover, plagiarism, a component of academic dishonesty is usually conceptualizing as using another person’s resource and claiming it as one’s own (Bashir & Bala, 2018a).

### **1.1.2 Pervasiveness of Academic Dishonesty among Students**

To explain the high frequency of academic dishonesty among students has been persistent, ranging from 13% to almost 95% (McCabe & Trevino, 1997; Graham, Monday, O'Brien & Steffen, 1994; Pullen, Ortloff, Casey, & Payne, 2000;



Park, 2003; Williams & Hosek, 2003). Although, academic dishonesty has been a concern in higher educational community for years (Gallant, 2008; Kibler, 1992), universities and colleges have not established any approach to mitigate academic dishonesty. Notwithstanding, academic dishonesty inhibits with what is supposed to be a collaborative endeavor among students, faculty and administration to accomplish fundamental educational objectives (Bowers, 1964, Keith-Spiegel & Whitley, 2001). Specifically, with the instantaneous academic dishonesty in campuses, mistrust develops among people who could lead to lack of assurance in education and the educational community could lose support from the society (Keith-Spiegel & Whitley, 2001).

Academic dishonesty as a discipline of investigation is relatively new. Indeed, Gallant (2006) asserts that rigorous investigations of academic dishonesty started only in the 1990's. Firstly, Bowers (1964) conducted the initial large-scale study about college cheating in 1963. His investigation was specified to 5,000 college students on 99 multiple campuses and explored that approximately one of every two students had involved in academically dishonest practices in colleges. In an investigation by Singhal (1982), 56% of students reported to having dishonest academic practices at the college level. Meanwhile, 79% of faculty who found academic dishonesty in their classrooms, only 9% approved the activities. Later on, Haines, Diekhoff, LaBeff and Clark (1986) stipulated that 54% of students engaged to dishonest academic acts, and 1% admitted being caught. Next, McCabe and Trevino (1997) asserted that 70% of students in 1993 reported to having cheated on a test and 87% cheated on written work at least once. Moreover, 52% copied from other students, and 25% plagiarized. In addition, Cizek (1999) revealed that more than half of all college students cheat. Recently, there is drastically increasing concern that technology is making it continuously easier to involve in all types of dishonest behaviours (Born, 2003; Underwood & Szabo, 2003; Scanlon, 2003; Campbell, 2006).

However, it has been assessed that the incidence of academic dishonesty in campuses suggests that the majority of all students cheat at some point in their educational endeavor (Davis, Grover, Becker, & McGregor, 1992). Harding (2001) reported that large number of students, who confessed to having copied another student's assignment (74%), copied passages from a textbook for homework assignments (62%) and shared answers with associates in a tough class (51%).

Similarly, Babu, Joseph, and Sharmila (2011) stated that 75% have given proxy for attendance and 49% have cheated from others record book, 74% of students have cheated from their friends during a theory examination, 2% have tried to get the question paper before examination, 5% have inclined their teachers by unfair means to attain more scores, 45% had prior information about the exam condition during practical exam, 81% have got technical assistance, and 54% of them have inaccurately accepted methodical conclusions. While as Petrak and Bartolac (2013) found that 98.4% had copied from others during an exam. On the other hand, Tadesse and Getachew (2010) found that 96.4% of participants admitted in involving on assignment-associated dishonesty and 82% on exam-associated ones, and recent research shows that, on average, about 80% of students cheat in some way (Witherspoon, Maldonado, & Lacey, 2012). More recently, Abusafia, Roslan, Yusoff, and Nor (2018) showed that 82.10% of students had engaged in an act of academic dishonesty in an academic setting and the most frequent form of academic dishonesty in an academic setting was plagiarism (77.10%).

The high frequency of dishonest academic practices is serious concern across educational community. However, Keith-Spiegel and Whitley (2001) recommended seven ramifications of student's academic dishonesty: First, students who perform dishonest academic practices on assignments and examinations are more probable to receive better grades than students who do not cheat. Consequently, honest students are positioned at a disadvantage when their grades are compared to the grade point averages and test performance of dishonest students. Second, when students see others dishonest academic behavior, and when the college/university does not act to penalize the offender, a student is left to think that such dishonest academic acts is tolerable. Third, students who act dishonest behavior do not learn, which opposes the mission of higher education since academically dishonest acts devalue the quality of a college degree. Fourth, in looking dishonest acts this promotes demoralization of students who do not cheat. In other words, students who do not involve in performance of dishonest academic acts may begin to consider that hard work does not lead to academic accomplishment and that performance of dishonest academic acts is the best way to be flourishing in college. Fifth, students' performance of dishonest academic practices in college tends to cheat in their careers. If dishonest practices are left unrestricted, cheating becomes part of a practical work. Sixth, the

fame about academic cheating can crash a college's prestige. Seventh, perseverance of cheating can conclusively lead to lack of assurance in education, and the whole higher education community could lose buttress from the society. These seven ramifications stipulated by Keith-Spiegel and Whitley (2001) clarify that academic dishonesty in the higher education harmfully affect for all people.

Besides, academic dishonesty brings about proliferation of incompetent graduates at workplaces (Harding, Carpenter, Finelli, & Passow, 2004). This leads to weakening of self-confidence of students (Lambert, Hogan, & Barton, 2003; Kelly, Gutmann, Schneiderman, DeWald, McCann, & Campbell, 2008), and may accordingly spoil the reputation of an educational institution (Whitley & Keith-Spiegel, 2002; Petress, 2003). It could also cause damage of quality for college education (Harding et al., 2004). These may outcome in severe intellectual and physical damage to others and cause the young persons to increase energetic attention in more venal academically dishonest practices of all types (Petress, 2003).

### **1.1.3 Causes of Students to Engage in Academic Dishonesty**

In looking at why students cheat, prior studies have revealed several reasons of students' involvement in academic dishonesty such as job competition, poor academic standards, class sizes, and access to unconstrained resources on the internet (Burton, Talpade, & Haynes, 2011). Jones (2011) revealed three top reasons of students to engage in academically dishonest practices which were grades (92%), procrastination (83%), and too busy which lead to not adequate time to complete assignment or study for test (75%). Pullen, Ortloff, Casey and Payne (2000) also found various causes of academic dishonesty like bulky classes, competition for jobs, unfriendly associations with teachers, achieving higher grade point average (GPAs) in order to enter graduate school, to cheating culture that is accepted by the community. On the other hand, investigators provide some extra reasons for why students cheat in academia: (a) efficiency gain (Park, 2003; Payne & Nantz, 1994), (b) lack of comprehension of what constitutes plagiarism (Park, 2003), (c) personal values (Park, 2003; Payne & Nantz, 1994), (d) time management problems (Lambert et al., 2003; Park, 2003; Payne & Nantz, 1994), (e) temptation or opportunity (Park, 2003), (f) negative attitudes toward teachers or classes (Park; Payne & Nantz, 1994), (g) defiance or lack of respect for authority (Park, 2003), (h) a lack of deterrence (Park; Payne & Nantz, 1994), (i) peer pressure (Payne & Nantz, 1994), (j) a personal crisis

(Lambert et al., 2003), (k) a view of cheating as having a minimal effect on others (Payne & Nantz, 1994; Park, 2003), (l) academic procrastination i.e., delay in college-related activities (Liesera, Wijaya, Natalia, & Hutapea, 2015; Roig & TeTommaso, 1995; Patrzek, Sattler, van Veen, Grunschel, & Fries, 2014), and (m) external locus of control (Forsyth, Pope, & McMillan, 1985; Leming, 1980).

Academic dishonesty arises, from a deterioration of moral values as documented over the past decades by the Josephson institute (Kolanko, Clark, Heinrich, Olive, Serembus, & Sifford, 2006). Cheating is prevalent among students who perceive that their friends cheat and are not penalized (Bowers, 1964; McCabe & Trevino, 1993, 1997). Pressure to accomplish higher grades in order to secure good job (Bowers, 1964; McCabe, Trevino, & Butterfield, 1994). The pressure to accomplish is a salient predictive aspect of academic dishonesty. According to Taylor, Pogrebin and Dodge (2003) the force to do well comes from four diverse sources: a) self-created pressures (Mazar, Amir, & Ariely, 2008), b) family and parental pressures, c) peer pressures (Carrell, Malmstrom, & West, 2008), and, d) academic environment pressures, all associated to the lack of self-control (Smith, 2004; Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009). To conclude, it is generally understood that the prevailing cause was performance.

Other possible causes have been traced to individual differences such as precise personality traits, prior cheating behavior, lack of respect for authority, time management problems, perceived pleasure from dishonest academic practices and peer pressure i.e., pressure comes from peers (Buckley, Wiese, & Harvey, 1998; Chapman, Davis, Toy, & Wright, 2004; Park, 2003; Payne & Nantz, 1994; Tibbetts, 1999). McCabe and Trevino (1993) recognize peer pressure as one of the most powerful contextual variable in dishonest behavior. Using social learning theory (Bandura, 1971) as an explanatory framework, they suggested that strong pressure of peers' activities may propose that academic dishonesty not only is learned from observing the activities of peers, but that peers' behavior provides a variety of normative support for academic dishonesty. The fact that others are performing dishonest academic acts may also recommend that, in such an environment, the non-cheater feels left at a disadvantage. Thus, dishonest academic acts may come to be viewed as a tolerable way of receiving and staying ahead.

Empirical verification suggests that student performance of dishonest academic acts is more probably to occur when students sign up in highly cutthroat school environments (Taylor et al., 2003). In such institutional climate, students' belief of success (Whitley, 1998) and fear of failure (Schab, 1991) become motivating forces of student performance of dishonest academic practices as a means to stay alive in the environment through getting achievement using illicit means. Students are under pressure, especially by parents, to succeed and when they find themselves unable to meet the expectations, they turn towards performance of dishonest academic acts. Similarly, parental expectations for academic accomplishment may also cause student to adopt dishonest behaviors to meet their parents' desires and wishes for better grades. Studies have exposed that the greater the parental pressure placed on students for achievement, the greater the probability of cheating will occur (Greene & Saxe, 1992). Specifically, when parental expectations are even unrealistic or too lofty, students turn to academically dishonest practices, to attain good grades that meet their parental expectations (Taylor et al., 2003). Accordingly, the academic environment constitutes the most significant antecedent of pressure which might force a person to perform dishonest academic practices in an attempt to accomplish advantageous end goals that are set by the educational setting. This structure generally formulates enormously cutthroat situations for students, since it demands huge amounts of endeavor and time spent out of school doing homework, studying for exams and developing projects (Taylor et al., 2003).

#### **1.1.4 The Components of Academic Dishonesty**

The literature suggests that academic dishonesty is a multidimensional concept (Ferrari, 2005; Iyer & Eastman, 2008; Kaur, 2011; Roig & DeTommaso, 1995). Ferrari (2005); Roig and DeTommaso (1995) yielded that academic dishonesty is a two dimensional construct viz: cheating and plagiarism. While Rawwas, Al-Khatib, and Vitell (2004), in building on the research of Rawwas and Isakson (2000), came up with four domains for academic dishonesty namely receiving and abetting academic dishonesty, ignoring prevalent practices, obtaining an unfair advantage, fabricating information.

The four components of academic dishonesty, according to Iyer and Eastman (2008) were plagiarism, cheating, electronic cheating and seeking outside help. Dawkins (2004) in his study yielded four components: copying from the internet;

cheating on classroom tests; knowledge and awareness of others' (peers) cheating and lying to avoid detection. Whereas, Ledesma (2011) explored four components namely cheating, outside help, plagiarism and tolerance. Moreover, Munoz-Garcia and Aviles-Herrera (2014) concurred with the four factors: falsification or deceptive conduct; group work; plagiarism and dishonest behaviour in academic work or examination. Elminoglu and Nartgun (2009) came up with four factors namely tendency towards cheating; dishonesty tendency at studies as homework/project etc; dishonesty tendency at research and process of write up and dishonesty tendency towards references.

Also, Hensley, Kirkpatrick, and Burgoon (2013) concurred with three domains viz: cheating on tests, plagiarism, and false excuses or falsification. Yang, Huang, and Chen (2013) yielded academic dishonesty as seven dimensional construct: plagiarism, cheating on an examination, deceptive infringement, improper cooperation, misuse of credit, concealment and tampering, and behind-the-scenes work. In Indian context, Kaur (2011) recommended five dimensions i.e. cheating in examination, plagiarism, lying about academic assignments, interference during instructions and damaging intellectual property. Furthermore, Akbulut et al. (2008) yielded five components viz: fraudulence, plagiarism, falsification, delinquency and unauthorized help. Jurdi, Hage, and Chow (2011) explored three components: cheating during examinations, plagiarism on written assignments, and falsification. In addition, Chukwuemeka, Gbenga, Sunday, and Ndidiamaka (2013) came up with two components i.e. cheating in examination and coursework. More recently, Adesile, Nordin, Kazmi, and Hussien (2016) concurred with the three dimensions namely cheating, plagiarism and research misconduct. A historical framework about components of academic dishonesty and its operationalization and conceptualization provides valuable understanding regarding development and validation of academic dishonesty measurement in this study.

### **1.1.5 Theories to Explain Academic Dishonesty of Students**

In order to enable an empirical examination of the conceptual framework of academic dishonesty, investigators have anticipated multiple theoretical perspectives, such as self-control theory (Gottfredson & Hirschi, 1990), rational choice theory (Tibbetts & Myers, 1999), social learning theory (Bandura, 1971), theory of planned behavior (Ajzens's, 1991) and the theory of moral reasoning (Miller, Murdock, Anderman, & Poindexter, 2007). A historical overview of major theories of academic

dishonesty and its operationalization and conceptualization is important to illustrate what psychological understanding has to offer to enrich the conceptual framework of academic dishonesty and the understanding of student performance of dishonest academic acts within social contexts.

The most promising conceptual frameworks to identify the etiological academic dishonesty are self-control theory of crime (Gottfredson & Hirschi's (1990). This is a theoretical representation which attempts to elucidate all types of deviant behavior, at all period irrespective of the circumstances and situations that are concerned in each case. The theory's basic argue is that low self-control is the prime individual trait causing immoral behavior (Gottfredson & Hirschi, 1990), and that persons who lack self-control have personalities that incline them to commit nonstandard acts since they fail to understand the negative or painful consequences of their behaviour (Arneklev, Grasmick, Tittle, & Bursik, 1993; Britt & Gottfredson, 2003). This approach holds that kids enlarge levels of self-control by about the age of seven or eight years, and these levels remain relatively stable for the rest of their life. One of the core stand point of this theory is that deprived early childhood family communication cause's poor self-control and, in turn, poor self-control causes engagement in crime and analogous acts because it makes an individual vulnerable to instant temptations to undertake acts of fraud or force in the pursuit of self-interest (Gottfredson & Hirschi, 1990).

Researchers interpret academic dishonesty from their disciplinary perspectives. Educational theorists attribute cheating to poor learning environments, disengaged faculty and a curriculum that does not teach moral and ethical principles (Austin & Brown 1999; Underwood & Szabo, 2004). Educational research has shown that academic dishonesty ensues most frequently when (i) a small possibility of success on assessments (ii) small risk of punishment such as detention, and (iii) great importance placed on assessments (Vitro & Schoer, 1972). The theoretical basis for expecting the differences in major and minor counts of academic dishonesty is that when there are higher stakes for the learner, the return is greater. Psychologists put forth theories of poor ethical and moral reasoning, yet there are studies that have found that those students with high moral reasoning cheat as often those with lower levels of moral reasoning (Cummings, Maddux, Harlow, & Dyas, 2002). Social psychologists examine the social impact of academic dishonesty, and the relationships

students have with their peers and teachers (Anderman, Freeman, & Mueller, 2007; Rabi, Patton, Fjortoft, & Zgarrick, 2006).

Some researchers claim that more severe penalties equitably distributed will provide an atmosphere that deters cheating (Macdonald & Carroll, 2006). Others blame our cheating culture with its overall acceptance of cheating behaviours (Langlais, 2007; Vojak, 2007; Callahan, 2004). The rational choice theory addresses the likelihoods and sizes of punishment and reward that are perceived by those involved (Michaels & Miethe, 1989). According to Buckley, Wiese, and Harvey (1998), the rational choice theory indicates that people are rational and make choices and practice behaviors that reflect the relationship of the possible risks and the possible return of a given circumstance.

Bandura's social learning theory (1971) stipulated that behavior patterns could be learned through a person's experience or by watching how others in their environment behave. The social learning theory shows that the way one acts can be attributed to his environment. According to Michaels and Miethe (1989), the theory shows that academic dishonesty will differ as a result of the direct amount of support they feel they are receiving from others and how strong their position on academic dishonesty may be. Thus, demographic groups and peers have the ability to influence a learner's behavior in regards to academic dishonesty. This theory shows that a person's actions can be attributed to his environment and the people they interact within that environment.

Theory of planned behavior (Ajzen's 1991) conceptualizations has inspired much empirical research, shows promise in providing and predicting one possible rationale for academic dishonesty (Beck & Ajzen, 1991; Harding et al., 2007; Whitley, 1998; Stone, Kisamore, & Jawahar, 2007). Such investigation may update research that investigates factors and motives influencing immoral workplace behaviors. The theory of planned behavior (Ajzen, 1985, 1991) stipulates three mechanisms predict intention to involve in a precise behavior and consequent involvement in the behavior. The core of the model is that intentions to involve in a behavior precede real involvement in the behavior. So, the intentions to involve in a behavior are exaggerated by three mechanisms: (i) beliefs about a behavior or its consequences i.e., attitudes toward the behavior, (ii) normative expectations of other people regarding the behavior i.e. subjective norms and (iii) the perceived ease or



difficulty of performing the behavior i.e., Perceived behavioral control. Moreover, perceived behavioral control was added by Ajzen from the theory of reasoned action. Fishbein & Ajzen (1975) to improve prediction in situations where behavior may be inhibited and/or the behavior violates rules or norms. An understandable example of this is the case of academic dishonesty, plagiarism and other academic dishonesty acts that break academic integrity policies.

Storch and Storch (2003) found a strong relationship between involvement in academic dishonesty behaviors and sanction of such behaviors. Stone et al. (2007); Harding et al. (2007) found attitudes to be significant predictors of dishonest academic acts. Harding et al. (2007) noted, as did Beck and Ajzen (1991), that perceptions of moral obligation and attitudes were highly associated. Studies have revealed that students with positive attitudes toward academic integrity policies are more probable to inform cheating than those who consider the policies as unfair (Simon et al., 2004). There is substantial study showing that people are influenced by the behavior of others. This influence can create a force to conform to the behavior of members of a group (Asch, 1951), or may convey either what most people do in a given circumstances (i.e. descriptive norms) or behaviors that are connected with sanctions or approval (i.e. injunctive norms) by others (Reno, Cialdini, & Kallgren, 1993). Whitley (1998) revealed a very strong association between subjective norms and cheating behavior. The rigorous theoretical framework suggests that academic dishonesty is cheating of any type encompassing misrepresenting one's work, claiming others work and falsification of information. However, as can be seen in this overview, the conceptualization and operationalization of this concept, ramifications, pervasiveness or rates, causes, analysis of multidimensionality, theories, outcomes of educational community in a context where occurs dishonest academic practices.

## **1.2 PERSONALITY HARDINESS**

Embarking upon an educational career is an exciting and enjoyable practice for many learners. However, the shift from higher secondary to college may show extreme more stressful than interesting. For the first time leaving home, writing assignments/term papers, examinations, and all requirements of academia are experienced as massively disturbing by several learners (Murphy & Archer, 1996), contributing to deteriorating in both physical and psychological health (Misra & McKean, 2000). Also, the burdens of academia are probable to be among the most

substantial stressors in a learner's life. The most stressful annoyances stated by students were college-associated, encompassing preparing term papers, taking assessments/examinations, and the continuous burden of studying (Schafer, 1996). For numerous undergraduate students the end outcomes of these stressors are high intensity of depression and anxiety (Bouteyre, Maurel, & Bernaud, 2007), more regular occurrences of sickness (Lesko & Summerfield, 1989), worse educational performance (Struthers, Perry, & Menec, 2000), or leaving from academia (Daugherty & Lane, 1999).

Hardiness, alternatively denoted as personality hardiness, psychological hardiness, or cognitive hardiness in the literature, is a personality style presented by Kobasa in 1979 (Huffman, Vernoy, & Vernoy, 1994). According to Kobasa (1979), personality hardiness is a set of beliefs about self and the world. It has three constituents, control, commitment, and challenge. The first component, control, is defined as an inclination to believe and behave on the events which occur around the person. The second one, commitment, is defined as an inclination to being involved in daily life activities and an internal interest and curiosity around world including society, things as well as people. The last one, challenge, is defined as a belief to change and avoid of stagnation which in turn can lead to personal growth or a threat to security. Furthermore, Maddi (2004) viewed hardiness as attitudes that together make people able to turn stressful circumstances from potential threats into opportunities. Conversely, Bartone (2006) defines hardiness as something more global than mere attitudes. He conceives hardiness as a broad personality style or generalized mode of functioning that includes cognitive, emotional, and behavioural qualities. Personality hardiness is one of the novel and imperative predispositions of personality. Persons high in personality hardiness positively commit themselves to what they are doing mostly believe that they can regulate actions and look alteration to be a common impetus or challenge to growth (Kobasa & Puccetti, 1983). Besides, Maddi (1997) theorized personality hardiness as beliefs and attitudes that assist person to manage with disturbing circumstances.

Scholars have claimed that personality hardiness permits persons to accept and alter problematic situations so that they become less stressful (Kobasa, 1979; Maddi & Kobasa, 1984). Similarly, number of studies has found that personality hardiness stimulates needed activities, such as relaxation and exercise, which afford long-term

aids and decrease the occurrence of stress-associated mental illnesses, bodily illnesses, and impaired performance (Maddi & Khoshaba, 2005; Maddi & Kobasa, 1984). Also, Maddi (1999) revealed that organism strain negatively related to personality hardiness. Thus, better degree of personality hardiness may contribute in the organization of anxiety, which, in turn, could lead to a number of fitness welfares, comprising lesser stress intensity, better bodily fitness, and better mental wellbeing.

Furthermore, individuals who perceive greater intensity of stress without deteriorating ill have a structure of personality characteristics distinguishing them from an individual who becomes ill under strain. This personality alteration is greatest categorized by the construct “personality hardiness”. Personality hardiness reflects the person’s reaction to events of life professionally and personally (Kobasa, 1979). Similarly, hardy persons cope with numerous stressors like family and professional life. For instance, work-related roles and interactions are healthier than those persons who are not hardy.

Personality hardiness has been shown to be related with the person’s use of energetic, problem focused coping approaches for dealing with disturbing actions (Genrty & Kobasa, 1984). Hardy persons clearly have a normal benefit than those who do not have these personality qualities; nevertheless study is signifying that those who do not obviously have the personality hardy traits can truly acquire them, with practice and time, and so upsurge own heights of personality hardiness. Individuals having a hardy personality don’t mean that an individual never suffers strain; it implies that their capability to deal with it, without it producing a problem, is better. It’s about knowledge to regulate how to respond the challenges face in a more confident, flexible, and less damaging way.

Moreover, everyday individuals experience circumstances that have the potential to be worrying. Whereas some persons mentally and physically fall apart when facing main challenges and changes in their life, some people have personality traits to flourish in this kind of circumstances. Personality hardiness is a substantial construct in elucidating individual alterations in individual’s capability to deal with tense conditions. Hardy individuals have a greater intellect of life and commitment towards work, a better sensation of control over what occurs to them, and are more exposed to variations and to face encounters in life. They understand worrying and problematic involvements as usual structures of their existence which is stimulating

and valuable. Theory of hardiness emphasizes on the individual that remains comparatively strong after facing high quantities of worrying life actions.

Scholars have found that individuals having hardiness personality traits do not give up easily under stress, become ill fewer commonly, and have the capability to act in an adaptive way when pressure is experienced (Kobasa, Maddi, & Kahn, 1982). Thus, hardy persons understand actions in prime appraisal differently than persons who are not hardy, when things go incorrect or things are out of mechanism and actions become unpredictable, they don't see a frightening difficult to be avoided but instead to be courageously confronted. During the past two decades, personality hardiness has appeared as an imperative aspect in offering or buffering confrontation toward the effects of strain. Individual possesses hardy personality is characterized in relations of being capable to look at a condition from diverse viewpoints, placing it into the wider setting in which it does not appear so unpleasant (Maddi, 1999). Furthermore, Maddi and Khoshaba (2005) documented that one of the features of hardiness is the capability to know and face the truth of the condition. On the other hand, low levels of personality hardiness are frequently associated with rejection and separating with the difficulty at hand. According to Judkins, Reid, and Furlow (2006) personality hardiness protects against strain in two ways: it changes views of pressure and activates active managing approaches. Individuals having hardy personality are said to exhibit tendency that stressors are unstable and they can impact what is happening around them with a preparedness to act on that belief (control). According to Maddi, Harvey, Khoshaba, Lu, Persico, and Brow (2006) hardy persons are healthier capable to get provision from associates, family and colleagues, constructing helpful and inspiring connections to help and cope worrying circumstances.

Nevertheless, hardy persons are not subject to less or fewer severe worrying actions than non-hardy persons, hardy persons experience more optimistic actual results due to their judgments of disturbing happenings (Dolbier, Smith, & Sternhardt, 2007). To summarize, personality hardiness construct is used to define the characteristic or trait of those who persist mentally or physically fit when and after facing upset, hardships, and life difficulties. It encompasses a plethora of attitudes, beliefs, personal temperaments, and behavioral predispositions that differentiate strong persons from those who become ill. Hardy persons tend to depend on problem-focused tactics to adapt tense conditions into either transformative or benign

understandings. Persons who are not hardy tend to trust on estrangement coping approaches comprising repression, withdrawal, and denial. These approaches regularly fail to alter the worrying circumstances or resolve or adjust to difficulties and, in several cases, may even subsidize to the mental pain already perceived. For instance, when challenged with a difficulty, persons may emphasize their capabilities on accusing others or themselves for their distresses instead of functioning toward a resolution to alteration their conditions for the healthier. Personality hardiness research recommends that those with higher heights of this construct display higher levels of mental and physical health.

### **1.3 ANOMIE**

The conceptualization of anomie was originated in sociology by Emile Durkheim (1964) [1893] who defined it as “breakdown in social structure and moral deterioration”. Merton (1962 [1957]) extends this thinking that anomie originates from discrepancy between the social aspirations and legitimate means to accomplish these goals. While as MacIver (1950) defines psychological anomie as the breakdown of the individual's sense of attachment to society. Srole (1956) explored anomie as a psychological state where an individual may feel the complexity of integrating into contemporary society. Moreover, anomie is a set of feelings, attitudes and beliefs in the individual's mind. Specifically, it is the feeling that the world and oneself are adrift, wandering, lacking in clear rules and stable moorings (Davol & Remaians, 1959; McClosky & Schaar, 1965). Also, anomie has been used to describe a disorganized and normless society and to designate the psychological reaction of persons to a disrupted society (Elmore, 1965).

Fischer (1973) and Teevan (1975) conceptualizes anomie differently as a feeling of cynicism (i.e., distrust), powerlessness, and social isolation. Travis (1993) synonymized anomie with alienation and defines it as a psychological state where aspirations are not fulfilled. That is, members of society become alienated if they are placed in marginal situations and if their goals are left unmet. In regards to measuring anomie, he asserts that previous studies primarily focused on the normative structures of society (e.g., class structure) and its effect on persons rather than measuring the attitudinal levels of examination (e.g., attitudes, beliefs and values) that are important in studying anomie. In many cases anomie has been defined as in terms of norms and

cultural values (Messner & Rosenfeld, 2001; Muftic, 2006) and the degree of corruption within a given society (Andvig, 2006; Kamensky, 2016).

Messner and Rosenfeld (2001) further elaborated anomie differently and demonstrated it as a set of cultural values related with individualism, fetishism of money, universalism and achievement orientation. Institutional anomie theory (IAT) asserted that society is collection of institutions that function to control human behavior. These four institutions are the polity (political system), economy, the institution of education and the institution of the family. Furthermore, anomie refers to a declining of social norms and cultural values (Yang, 2015). Recently, Teymoori et al. (2016) conceptualized anomie as the shared subjective perception about the state of society adjoining two situations: the breakdown of social structure (i.e., distrust and moral decline) and the breakdown in leadership (i.e., lack of legitimacy and effectiveness).

In anomie, people start to feel lonely, develop hostile perception towards others, lose their morals, and behave based on self-interest (Dean, 1968). Anomie feelings lead the individual to feel angry and frustrated and emerge when the means and goals become separated in a society and people do not receive enough opportunities to reach their goals (Agnew, 1980). Lack of opportunity to achieve goals follows mainly as a result of the individual's position in the social structure as determined by numerous factors including occupation, income, education, age, social class, participation in formal and informal organization and religiosity. Anomie also named as a relative state of normlessness is defined as individual's lack of integration in social life (Caruana, Ramaseshan, & Ewing, 2000).

Thus, anomie is a state of mind and set of beliefs, attitudes and personal feelings that give a kind of feeling to the individual that his surrounding is full of chaos and confusion which does not bear any regularity and systematic rules (Heydari, Davoudi, & Teymoori, 2011). For anomic person, the norms that regulate the behavior are vague and weak and he is living in a condition where "norms pressure" is low and moral values have collapsed. The anomic individual is isolated and mistrusted to his surrounding (Teevan, 1975; Dean, 1668). Anomie encompasses the alienating from society and social institutions, powerlessness, disappointment and mistrust to authority and society (Srole, 1965). It is sometimes characterized by

feelings of normlessness, purposelessness and meaninglessness (Dean, 1961; Seeman, 1959; Srole, 1956; Thorlindsson & Bernburg, 2004).

Although, the operationalization of anomie as a state of mind has associated anomie with a tendency of individuals to be self-interested (Konty, 2005), normless (Menard, 1995; Baumer, 2007; Bjarnason, 2009), isolated and lonely (Srole, 1956; Fischer, 1973; Martin, 2000), having a felt sense of meaningless (Martin, 2000; Thorlindsson & Bernburg, 2004), and having a felt sense of purposelessness or powerlessness (Form, 1975; Bjarnason, 2009). Thus, the construct of anomie can be conceptualized as a person's characteristic when the individuals believe that there are no rules, social norms and prescriptions, which can control his/her own behavior as well as the actions of other people of the society, when the individual abides the psychological state of social isolation and meaninglessness (Levina, 2015).

Messner and Rosenfeld (2001) supposed that the aspirations have deep origin in culture and the most significant aspirations are wealth and money. Anomic individual is eager to do whatever just to attain that aspiration. In other words, for anomic person, all of behaviors are towards the monetary success. In fact, money becomes fetishism of money epitomizes the progress in economical achievement (Muftic, 2006). In this state of being, the individual is also outside the realm of morality (Caruana, Ramaseshan, & Ewing, 2000) and Tsahuridu (2006) describes anomie as "a measure of relatedness to society". In India, a host of societal and social problems are escalating, some of them to have sprung up recently while some pre-existing ones have started worsening. These problems are worth being viewed from the anomic lens. They may have much to do with each other at first sight, yet all of them conceptualized as expressions of anomic tendencies (Thiel, 2011).

The primary feature of anomie, common amongst many explanations, is that it is a state of abnormality and anomaly, which can be traced in its literal meaning and etymology. The Cambridge dictionary (2008) defines anomie as 'a state of no moral or social principles in a person or in society'. Etymologically, anomie is rooted in the Greek word 'anomos' which comprises of two parts: 'a' as 'non' and 'nomos' as law and order (Orru, 1987) referring to a context 'without law and order'. In addition, anomie is a complex, dynamic concept that refers simultaneously to a social state and an individual state of mind (Bjarnason, 2009). An intensive investigation of conceptualization and operationalization suggests that anomie is comprehensive and

encompassing constructs of alienation, powerlessness, confusion about rules (MacClosky & Schaar, 1965; Fisher, 1973; Martin, 2000; Thorlindson & Bernberg, 2004). More recently, it has been used to explore and understand the moral behavior of people at work (Passas, 1999; Tsahuridu, 2006; 2011).

### **1.3.1 The Dimensions of Anomie**

The article of Srole, (1956) made a first operationalization of anomie who evaluated anomie with five statements. The first anomie scale, developed by Srole (1956), after the work of Durkheim was constructed to measure the hopelessness, despondency, and despair that presumably arise from the relative lack of integration in social life. Five items were used expressing lack of faith in public officials, in people in general, and in the future (Warsh, 1964). But he evaluated it as single dimensional construct. The operationalization of anomie is faced with controversies among researchers, so is its dimensionality too. Because some researchers viewed the phenomenon as a multi-dimensional concept with three components; Teevan, (1975) yielded three components, (i) powerlessness (ii) feeling of cynicism i.e., distrust (iii) social isolation. Furthermore, Muftic (2006) developed institutional anomie scales based on IAT (institutional anomie theory) that covers the facets of each of the four values of culture are individualism, universalism, fetishism of money and achievement orientation.

Another investigation made by Adnanes (2007) postulated three facets of anomie; one indicates psychological anomie and another two components are normless and nostalgia referring to a person's attitude and feeling about the societal changes. There are some drawbacks in Adnanes's study; the investigator did not elucidate what accurately he signifies by nostalgia and psychological anomie (Heydari, Davoudi, & Teymoori (2011). Nonetheless, investigator like Bjarnason (2009) designed the anomie scale in a two-dimensional construct namely, (i) Exteriority & (ii) Constraint. In addition Heydari et al. (2011) developed feeling of anomie scale as three dimensional constructs i.e. (i) powerlessness (ii) meaninglessness and distrust & (iii) fetishism of money. Heydari et al. (2011) categorizes meaninglessness and distrust as a sole facet. This single classification runs contrary to the previous research studies, where meaninglessness (Dean, 1961; Travis 1993; Smith & Bohm, 2008) and distrust (i.e., cynicism) (McClosky & Schaar, 1965; Sampson & Bartusch, 1998) are characteristically seen as two different constructs.



The logic for this dimensionality is not clear (Yang, 2015). Levina, Martinsone and Kamerade (2015), analysis of empirical and theoretical studies of anomie and developed integrative multidimensional model of anomie, includes three main components of anomie, such as meaninglessness, normlessness, and social isolation.

Another research study by Yang, (2015) asserted that anomie is a two dimensional construct comprising of (i) meaninglessness and (ii) cynicism. More recently, Teymoori et al. (2016) elaborated anomie as two dimensional construct i.e., breakdown of social structure (moral decline and lack of trust) and breakdown of leadership (effectiveness and legitimacy).

Additionally, Srole's (1956) measure, the most cited scale for anomie research, is also the most used as the basis for investigating anomie in the workplace. While as McClosky and Schaar's (1965) scale is also used. However, McClosky and Schaar adopted a psychological approach, which is different from Srole's socio-psychological approach. Srole's (1956) theory pushed anomie into the psychological realm by emphasizing the interpersonal alienation aspect within the broader Durkheimian umbrella of self to other. Habitual patterns of behavior, emotion and thought that separate an individual from others could be described as traits of the person. Using Srole's scale, anomic research has supported links between increased rates of anomia and a wide range of socio-psychological factors. For example, studies have found that higher rates of anomie have correlated with radical and undesirable change expectancies (Reimanis, 1967), increased guilt and role confusion, reports of unsuccessful conflict resolution (Reimanis, 1974), increased suicide rates among individuals ages 18-24 (Boor, 1979), and higher among lower socioeconomic classes (Koenig, Swanson., & Harter, 1981). Additionally, higher anomie correlated with attitudes of indifference towards fraudulent behavior and unethical retail dispositions (Caruana et al., 2001), greater levels of theft, alcoholism, and academic dishonesty among individuals (Rosenbaum & Kuntze, 2003). Concerning individual-level outcomes, researchers found that anomie primarily undermines wellbeing and life satisfaction (Lachman, Weaver, 1998) and that it reduces happiness (Brockmann, Delhey, Welzel, Yuan, 2009). This is because individuals feel helpless and hopeless in their ability to work toward their desired goals (Elgar, Davis, Wohl, Trites, Zelenski, & Martin, 2011).

### **1.3.2 Theories of Anomie**

Durkheim (1966) explained anomie as a fracture in social solidarity, where traditional norms are weakened and moral individualism rises. That is, the stronger the human activities and collective states (e.g., religious ties and family ties) in a society, the less susceptible individuals are to suicide. From this, anomie can be understood as a breakdown of social norms that lead to meaninglessness and a life without purpose, and ultimately, higher rates of suicide. Using Durkheim's conception of anomie, Merton narrowed the scope of the theory from a sociological principle to one of individual perception and expectations of social structures (Rosenfeld, 1989) developing strain theory. In Merton's theory, when people are expected to strive towards reaching the goals of a society, but the means to reach it are insufficient, individuals may deviate from the norm (Scott & Turner, 1965). The anomic state results from inadequacies of means to meet the expectations of societal goals. Unlike Durkheim's framework, Merton believes that individual responses to anomic conditions are varied and not limited to suicide. Furthermore, these responses are adaptations to the anomic state (Merton, 1938). Merton's typology of deviancy consists of five behavioral responses that result from either rejecting or accepting social goals and means. The five domains are conformity, innovation, ritualism, retreatism, and rebellion. Each division is a result of two criteria: the first being an acceptance or rejection of societal goals (e.g., earning money, acquiring material goods), and the second being an acceptance or rejection of societal means (e.g., being educated, having a job) (Merton, 1938).

As suggested by Merton's typology of human behavior, conformists are those who accept cultural goals (e.g., attainment of wealth) and institutionalized means (e.g., getting an education). These are individuals who follow the normative rules and behavior and make up the largest portion of society. On the other hand, those who completely reject both goals and means would be considered retreatants. Such individuals are characterized as withdrawing or retreating from society as vagabonds, psychotics, or any people who reject and do not substitute any societal means and goals (Skiba, Smith, & Marshall, 2009). The third type are innovators, who accept the cultural goals but reject the institutionalized means, thus generating novel and sometimes illegitimate ways to attaining the goal-via theft or other innovative measures. The fourth are ritualists, who continue to subscribe to the means of society

when the overall goal is rejected. Ritualists in this sense are bogged down with focusing and conforming to rules and regulations (Merton, 1938). The fifth response is to rebel, and this classification deals with two criteria. First, both institutionalized means and cultural goals are rejected, and second, new means and goals are internalized as substitution. Such deviancy can be seen in extreme cases of human behavior (e.g., revolutions), but are not limited to merely negative outcomes. It is just as reasonable to see positive and progressive activities of rebellion. Merton's typology illustrates that deviant behavior can be relative to one's personality; individuals may respond differently depending on their rejection or acceptance of societal means and goals (Rosenfeld, 1989; Scott & Turner, 1965). More importantly, four of the five characterizations of deviant behavior (i.e., retreatist, ritualist, innovator, and rebellion) are responses to the anomic state. For conformists, the anomic state ceases to exist because meaning is found through the means and goals of the society.

The anomic state thus far can be characterized as a situation where the integration between cultural goals (i.e. passions) are not aligned or regulated well by the institutional means (e.g., religion, public agencies) to reach them. Under Merton's typology, conformists perceive an alignment between the goals and means; however for retreatists, ritualists, innovators, and rebels, these are disconnected. It is within this disconnect where the anomic state rises, and Merton's adaptations rise. Whereas Merton understands anomie to be an interaction between individuals and society, Durkheim understands it as the influence of a situation on individuals. The theoretical difference between Durkheim and Merton is better understood when considering the motive behind individual responses to anomic conditions. The distinction rests in the characteristic of the deviant behavior (i.e., passive vs. active) and what fostered these outcomes.

Durkheim views deviant behavior as a result of moral confusion and lack of social direction. In contrast, Merton views deviant behavior as a response to the goals and beliefs of society (Hilbert, 1989). Thus, for Durkheim, confusion and normlessness supersede the human will to accept or reject social pressures. The difference in how each defines deviant behavior can be characterized as passive or active responses. Specifically, anomic suicide as a passive response is different from active responses like theft, fraud, and murder because of their intention. In addition, by active responses, it entails that Merton's typology of deviancy leads to social

repercussions, whereas Durkheim's suicide does not-hence its passivity. Like that of learned helplessness, suicide is a passive outcome where there is little degree of intent to reach a cultural goal, and the decision to endure an aversive situation is all that is left, and little social change can come about.

Conversely, there are deviant behaviors that can lead to micro or macro levels of social change. These are active responses like theft, fraud, innovation, and rebellion, which are intentional ways to reach some outcome. Ultimately, all human behaviors, including Durkheim's conceptions of suicide, correspond with Merton's typology of deviance. For example, going to school and job-searching are typical examples of conformist behavior, for ritualists, any action that is not goal-oriented and are enacted strictly because of rules, regulations, and simply part of the norm are considered ritual behavior. Acts like theft and fraud correspond to innovators; rebellions and terrorism corresponds with rebel, and suicidal behaviour corresponds with retreatists. Despite of the theoretical differences, if Durkheim's theory of suicide is mapped within Merton's typology of deviance, both theories of anomie can be seen as interconnected. The distinctions between Durkheim and Merton's anomie are important to be made because it illustrates how anomie has evolved across theoretical frameworks. Initially, anomie was seen as a social condition that influenced suicidal behavior. Since Merton, the theory became more comprehensive and applicable for understanding the interaction and relationship between the anomic state and how individuals respond. The factors that produce these behavioral responses are determined by a person's personality and its integration among the cultural goals and institutionalized means (Merton, 1938). It can be inferred from this that anomie can be understood not just through socio-economic measurements, but also quantified through the feelings, beliefs, and attitudes about one's place in society. Both Durkheim's and Merton's frameworks suggest that anomie is a condition based on multiple elements: the pace of life, realization of norms, and expectations of goals. These elements of society derive from individual thinking and can be observed at the level of human feelings, beliefs, and attitudes (Dean, 1961; Heydari, Davoudi, & Teymoori, 2011). Travis (1993) suggests that anomie should be studied as a psychological phenomenon rather than a social one, because social systems are no more than collections of individuals and their ideas. Moreover, it is the sum of individuals' anomie that inevitably creates an anomic society. Research has attempted

to bridge both macro and micro areas of anomie from how it works as a social force to its impact at the psychological level (Zhao & Cao, 2010). The literature review of anomie outlines the rigorous theoretical framework of the historical trajectory of its development.

#### **1.4 CONTEXTUAL INFLUENCES**

The contextual environment plays a key role in determining psychological development and behavior (Wise & King, 2008). Perhaps, the family is the most essential social milieu (Bray, Harvey, & Williamson, 1987). It has solicitous effect on how an individual interacts and behaves with others (Wise & King, 2008). Investigators have hypothesized that contextual environment influences a person's attitudes, beliefs and judgments (Vazsonyi & Flannery, 1997; Steinberg & Darling, 1994). In contextual environment, parental and peer jointly affect an individual throughout his life. It enhances well-being, self-esteem, core beliefs, empathy, as well as relational maturity and academic amplification (Wilkinson, 2004; Laible, Carlo, & Roesch, 2004; Fass & Tubman, 2002). The natural interaction between two contexts, school and family are often used to predict students' developmental output such as achievement (Thompson, Alexander, & Entwisle, 1988; Astone & McLanahan, 1991).

The investigation conducted by Pace (1962); Stern (1962) provided procedures of empirical distinctiveness of learning culture, the paradigm yielded by these researchers have given momentum of research enforced on the interaction between environmental characteristics and students. An assumption based on a division between individual and milieu has to comprehend psychological information about person as a contact of the effects of a prearranged inner life and a psychological world (Buytendijk, 1957). Furthermore, Osgood and Anderson (2004) indicated that contextual influences are consequences of emergent properties of social settings, and thus they cannot be accounted for at the individual level. Research on adolescent development suggests that three of the most important contexts in which adolescents are embedded are the family, peers and institution (Steinberg & Darling, 1994; Vazsonyi & Flannery, 1997).

Interestingly, Social Cognitive Career Theory (SCCT) postulated a novel effort to comprehend the processes through which people make choices, make interest and accomplish various levels of achievement in occupation and educational pursuits.

The theory asserted that cognitive variables that allow people to influence their own career development as well as contextual variables that increase or restrict individual's action or behavior (Lent, Brown, & Hackett, 1994). Moreover, Lee and Shute (2010) make an in-depth investigation of literature in the area of social, educational and cognitive psychology. He asserted that there are number of variables that have direct influence on academic achievement. He categorized these variables into two aspects like personal variables (learning strategies and student engagement) and later as social-contextual factors (social-familial influences and institutional climate). He documented relationships between social-contextual, personal factors and academic achievement. Similarly, Fass and Tubman (2002) suggested that attachment of peers and parents is a factor of wider patterns of adjustment and social competency that may function as compensatory or protective aspects throughout transitions in post adolescence (young adulthood), such as involvement in institution, and with its burden for performance. In addition, Bank, Slavings, & Biddle (1990) revealed that parents and peers have strong influences than faculty on the persistence of students.

Bandura's Social Learning Theory (1971) stated that behavior patterns could be learned through a person's experience or by watching how others in their environment behave. The Social Learning Theory shows that the way one acts can be attributed to their environment. Thus, demographic groups and peers have the ability to influence a learner's behavior in regards to adjustment. This theory shows that a person's actions can be attributed to their environment and the people they interact with in that environment. There is considerable research showing that people are influenced by the behavior of others. Similarly, social constructivists believe that one's environment plays a crucial role in the development of meaning where reality is constructed based on a person's experiences and interaction within that environment (Flick, 2006; deMarrais & Lapan, 2004). Social constructivism states that learning is not an individual endeavor based on either cognitive or behaviorist activities. Learning is not something that only happens in a classroom or with formal lessons; rather, one is learning all the time (Bredo, 1997). The role of culture and the construction of one's reality are founded in the society in which one lives. This situated or transactional perspective focuses on the relationship between humans and their environment. According to Vygotsky, this greatly complicates the learning

process because what we understand about beliefs and values is all socially constructed (Stage, Muller, Kinzie, & Simmons, 1998). The situated or transactional perspective also recognizes the role of others and their contribution to knowledge. It is not always that the teacher who determines what students should know. Particularly as it regards contextual environment, it appears peer influence, parental influence and institutional climate may be an important factor in social development of students. The current investigation hopes to develop an understanding of how parents, peer group and institution influences on behavior of undergraduate students. Such facts have potential to provide insight into how educational settings could be restructured in order to accommodate the requirements of all adolescents to become academically motivated and successful. What follows is brief introduction of three main contextual variables.

Peer influence is a peer or group of peers trying to persuade to think or act in a certain way, or to make a particular decision. Peers become an important influence on behavior during adolescence, and peer pressure has been called a hallmark of adolescent experience. Peers often act as role models, which are seen as powerful means of transmitting attitudes, values, norms and patterns of thought and behavior. There is no denying that peers can have a profound influence on a student's behavior. A student learns to involve in any practice or to refrain from such practice through communications with others. This starts in the home, but the most considerable pressure on college students is the attitudes and behaviors of their associates. These dominant groups contribute the person with normative definitions which categorize the bad behavior as right verses wrong, afford behavioral models of dishonesty or honesty, and provide social strengthening for commission or restraint of the deviant act (Akers, 1985, as cited in Lersch, 1999).

A substantial amount of a persons' time prior to embarking college is spent with one's family, predominantly one's parents. Consequently, it is likely that one's parents have a considerable magnitude of influence on their development all over the years. Although, students have amplified dependence during college, and the magnitude of time spent with one's parents may reduce, it would still appear probably that parents would have an influence on his/her development (Hinkelman & Luzzo, 2007). It may be significant to further investigate the association between family variables and their effect on an individual's psychosocial development during college.

Another study analyzed that parents are influential in the career domains of: education expectation, encouragement, vicarious learning, critical life events, and work identity (Fisher & Padmawidjaja, 1999). There are numerous parental constructs that have been explored to be related with college students' psychosocial development (Hickman, Bartholomae & McKenry, 2000; Kenny, 1990; Luyckx, Soenens, Goossens, & Vansteenkiste, 2007; Hahs-Vaughn, 2004; Hofer, 2008). Those constructs encompassing parental attachment, parenting style, parental level of education and parental regulation. These variables have been found to have an effect on students' self-esteem, academic performance, social competence, identity formation, satisfaction with the college experience, autonomy, and nonacademic experiences.

Moreover, college students recognize family to be a considerable influence in their career decisions (Bright, Pryor, Wilkenfeld, & Earl, 2005). Furthermore, parents think that they are the most significant influence on their children's career development in college (Taylor, Harris, & Taylor, 2004). Parenting style is one variable that may influence college students' development. Hickman et al. (2000) examined the influence of parenting styles on academic achievement. It was observed that authoritative parenting style was positively associated with student's academic adjustment (Hickman et al., 2000). In other terms, those parents exhibiting fair discipline styles and warmth had children with better academic achievement in college. This study suggests that parenting style may be connected with college students' academic success. Akhtar and Aziz (2011) observed students' perceptions of pressure from their peers and parents. However, parental pressure was operationalized as expectations from parents to abide by certain norms and values. The placing of these expectations itself was described as pressure, but they conceptualized pressure as having a more neutral valence and not being either positive or negative. They further described previous studies that classify parental pressure into two domains: pressure to conform and pressure to perform. Findings of their research indicated that academic achievement and parental pressure were positively associated. That is, the more parental pressure the student received the superior scores they received on their exam.

The third important predictor is institutional climate (as defined by Hoy, Tarter & Bliss, 1990) comprises the institutional characteristics that are constant in



and distinctive to a particular institute. Also, institutional climate refers to psychosocial climate of the institution as perceived by the person. It provides a measure of quantity and quality of the emotional, cognitive and social support that has been made accessible to the students during their college life in terms of student-teacher interactions. In other words, institutional climate refers to the quality and character of institutional life. It is based on patterns of college life experience and goals, reflects norms, interpersonal relationships, leadership practices, values, learning, teaching and organizational structures (National School Council, 2007, as cited in Bashir, 2014).

Similarly, campus classroom has been conceptualized as a dynamic environment that influences the students' experiences and education outcome (Astin & Panos, 1969; Moos, 1973). These early works established the important role of social interaction on learning. A four-year longitudinal study by Astin and Panos (1969) provided in-depth institutional factors and educational practices that influence the student's decisions to complete college and pursue a career. Their work is still considered groundbreaking because it identified faculty-student interaction as one of the most essential factors that keep students in university (Grimes, 1995; Levin & Levin, 1991; Millis, 1994). In this view, researcher operationalizes contextual influences as a process by which an individual's belief, attitude, judgement and opinion are influenced by others. Based on this conceptualization, investigator proposes an integrated viewpoint that students' social-contextual environment affects in the domains of attitude, behavior, and cognition that have to work in concert to generate optimal performance.

## **1.5 SIGNIFICANCE OF THE STUDY**

Academic dishonesty is a multifaceted and ubiquitous global phenomenon (Alleyne & Phillips, 2011; Imran & Nordin, 2013; Iberahim et al., 2013; Nazir & Aslam, 2010; Thomas, 2017; Tadesse & Getachew, 2010). Academic dishonesty has long been considered an imperative research problem (Whitley & Keith-Spiegel, 2001). The concern of academic dishonesty has been long-lasting in many occurrences and its impediment for progress is largely alarming (Tadesse & Getachew, 2010). In campuses, academic dishonest practices occur regularly and thus create enormous problems (Whitley, 1998), because at this stage undergraduate students are far from home and gain new ideas, experience, and peers in the novel environment (Nonis & Swift, 2010). In academia, moral values are eroding due to

competition of today's job aspiration and the ideas of winning at any price and created scandals such as copying, trading credentials, deceiving and cheating. This menace could undermine the excellence of education as well as undermining the vision of grooming honest, accountable and trustworthy professionals in the future (Naghdi pour & Emeagwali, 2013). Moreover, several researches reported that students, who are engaged in academic dishonesty, were more probably to engage in workplace dishonesty (Ellahi et al., 2013; Harding et al., 2004; Nazir & Aslam, 2010). Therefore, the understanding of the causes that affect student's decisions to involve in high frequency of academic dishonesty is important for academic institutions, in order to reduce its occurrence.

To understand this multifaceted problem, researchers have recognized numerous facets that seem to be related with student performance of dishonest academic acts. Most of the researchers (Kerkvliet, 1994; McCabe & Trevino, 1997) about academic dishonesty have been concentrating on demographic facets, ability indicators (task performance, grade point average, and academic aptitude), personality constructs or situational components such as sanctions/ rewards, low self-control, peer context, surveillance, academic procrastination, etc.

As argued above, various contextual, psychological and individual constructs have been explored but little understanding is existing concerning with psycho-social domains. The construct of anomie (psycho-social variable) as linked to academic dishonesty has been studied far less, provided the foundation for the current research problem. However, the concept of anomie has been of great concern to program formulators. So, very few investigations have been done to classify influence of perception of anomie on student performance of dishonest academic acts. On the other hand, the construct personality hardiness, a personality style, and a set of beliefs about self and the world has been examined far less in relation to academic dishonesty of students. Academic dishonesty needs to be explored more so that a deep analysis could be done to understand the complex human mind more. Further, this investigation focused on the relationships of various psychological and social factors were strengthening the missing or weak links between individuals' choices to indulge in academic dishonesty. Besides, student's dishonest academic act brings about spread of untrained graduates at marketplaces (Harding et al., 2004). This leads to diminish of self-esteem of learners (Kelly et al., 2008), and may subsequently indulge the

appearance of an educational organization (Whitley & Keith-Spiegel, 2002). It could also cause loss of value for college education (Harding et al., 2004). Meanwhile over the years, scholars have devoted concerted efforts on the frequency of academic dishonesty among students' population (McCabe, Treviño, & Butterfield, 2001; McCabe & Trevino, 1993).

Moreover, studies of the relationship between personality hardiness, anomie and contextual influences with academic dishonesty are not explored. However, not a single extensive study was found till date in Indian context. Though human mind is similar everywhere still there are cultural differences which have ample impact on the person's choice to dishonest behavior. Therefore, the present study was taken up to investigate academic dishonesty in relation to independent variables chosen from individualistic and social domain i.e. personality hardiness, anomie and contextual influences of undergraduates. The proposed study is needed by all those who want to curb academic dishonesty from our education system. Instead of controlling academic dishonesty at the time of occurrence, the root causes of its occurrence are needed to be checked. The study provides guidelines to educational administrators and planners whom to focus specially. While framing policies and programmes to control dishonest behavior, anomie and contextual influences of the cheaters will be considered.

Findings of the study will be helpful in the perspective of virtual learning settings, particularly in distance learning where social separation hinders learner's knowledge and performance. Information and communication technology has made dishonest academic practices easier and in online learning approach, projects are submitted and exams are administered through the internet. In universities/colleges, teachers will devise new methods and teaching techniques to tackle dishonest behavior among undergraduate students. Administration will be able to implement constructive measure to combat dishonest behavior among undergraduate students. Parents will be benefited by the proposed study to provide conducive environment to their children so that they do not cheat. The study will be helpful to them to identify risk of cheating among their children, and thus they will take preventive measures well in time, before the problem arises.

The recommendations of this research in the setting of higher educational organizations will provide a guide to administrators, policy-makers, and classify severe practices of academic dishonesty and accordingly their prerequisite preventive

measures. Recommendations of this research within the higher education context of India will might lead supervisors to review present strategies and codes of conduct.

This investigation attempts to provide insights into nature and frequency of academic dishonesty, with preliminary emphasis on colleges of Jammu and Kashmir. This study provides multi-faceted, hybrid approaches and strategies for mitigating the problem. Its goal is to discover appropriate tools, procedures, policies and best practices for controlling the problem and generating an effective environment of integrity. Therefore, this research aims to investigate effect of personality hardiness, anomie, and contextual influences on academically dishonest practices of students in college campuses of Jammu and Kashmir.

## **1.6 STATEMENT OF THE PROBLEM**

Derived from the significance, the problem has been stated as follows, PERSONALITY HARDINESS, ANOMIE AND CONTEXTUAL INFLUENCES AS PREDICTORS OF ACADEMIC DISHONESTY: A MULTICAMPUS INVESTIGATION

## **1.7 OPERATIONAL DEFINITION OF THE TERMS**

### **Academic Dishonesty**

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the falsification of information. In its operational terms, academic dishonesty refers to the scores of undergraduate students on Academic Dishonesty Scale (2018) developed by the investigator.

### **Personality Hardiness**

Personality hardiness refers to as a personality-based tendency to diminish the impact of stressful life events by optimistic cognitive appraisal and decisions coping action. In its operational terms, personality hardiness refers to scores of undergraduate students on Personality Hardiness Scale validated in Indian context (by the investigator (2018) originally developed by Nowack in 1990.

### **Anomie**

Anomie is a state of mind and set of attitudes, beliefs and personal feelings that give a kind of feeling to the person that his surrounding is full of chaos and

confusion which does not bear any systematic rules. In its operational terms, anomie refers to scores of undergraduate students on Anomie Scale (2018) developed by the investigator.

### **Contextual Influences**

Contextual influences are defined as the extent to which peers, parents and institution affect the attitude, thought and action of an individual. In its operational terms, the contextual influences refer to scores of undergraduate students on Contextual Influences Scale (2018) developed by the investigator.

### **Multicampus Investigation**

The term multicampus investigation refers to different sites of college campuses that have been taken altogether from different regions of Jammu and Kashmir.

## **1.8 OBJECTIVES**

1. To explore the levels of personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students.
2. To find out differences in personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students on the basis of gender, age, socio-economic status and region of college campuses.
3. To examine the relationship of personality hardiness, anomie and contextual influences with academic dishonesty of undergraduate students.
4. To examine the personality hardiness, anomie and contextual influences as predictors of academic dishonesty of undergraduate students.
5. To determine the contribution of various dimensions of personality hardiness, anomie and contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.

## **1.9 HYPOTHESES**

1. There exists no significant difference in academic dishonesty of undergraduate students on the basis of gender, age and socio-economic-status.

1(a) there exists no significant difference between male and female undergraduate students in their academic dishonesty.

- 1(b) there exists no significant difference in academic dishonesty of undergraduate students on the basis of age.
  - 1(c) there exists no significant difference between undergraduate students from low and high socio-economic status in their academic dishonesty.
  - 1(d) there exists no significant interaction effect of gender and age on academic dishonesty of undergraduate students.
  - 1(e) there exists no significant interaction effect of gender and socio-economic-status on academic dishonesty of undergraduate students.
  - 1(f) there exists no significant interaction effect of age and socio-economic-status on academic dishonesty of undergraduate students.
  - 1(g) there exists no significant interaction effect of gender, age and socio-economic status on the scores of academic dishonesty of undergraduate students.
2. There exists no significant difference in anomie of undergraduate students on the basis of gender, age and socio-economic-status.
- 2(a) there exists no significant difference between male and female undergraduate students in their anomie.
  - 2(b) there exists no significant difference in anomie of undergraduate students on the basis of age.
  - 2(c) there exists no significant difference between undergraduate students from low and high socio-economic status in their anomie.
  - 2(d) there exists no significant interaction effect of gender and age on anomie of undergraduate students.
  - 2(e) there exists no significant interaction effect of gender and socio-economic-status on anomie of undergraduate students.
  - 2(f) there exists no significant interaction effect of age and socio-economic-status on anomie of undergraduate students.
  - 2(g) there exists no significant interaction effect of gender, age and socio-economic-status on anomie of undergraduate students.
3. There exists no significant difference in personality hardiness of undergraduate students on the basis of gender, age and socio-economic status.

- 3(a) there exists no significant difference between male and female undergraduate students in their personality hardiness.
  - 3(b) there exists no significant difference in personality hardiness of undergraduate students on the basis of age.
  - 3(c) there exists no significant difference between undergraduate students from low and high socio-economic status in their personality hardiness.
  - 3(d) there exists no significant interaction effect of gender and age on personality hardiness of undergraduate students.
  - 3(e) there exists no significant interaction effect of gender and socio-economic-status on personality hardiness of undergraduate students.
  - 3(f) there exists no significant interaction effect of age and socio-economic-status on personality hardiness of undergraduate students.
  - 3(g) there exists no significant interaction effect of gender, age and socio-economic status on personality hardiness of undergraduate students.
4. There exists no significant difference in contextual influences of undergraduate students on the basis of gender, age and socio-economic status.
- 4(a) there exists no significant difference between male and female undergraduate students in their contextual influences.
  - 4(b) there exists no significant difference in contextual influences of undergraduate students on the basis of age.
  - 4(c) there exists no significant difference between undergraduate students from low and high socio-economic status in their contextual influences.
  - 4(d) there exists no significant interaction effect of gender and age on contextual influences of undergraduate students.
  - 4(e) there exists no significant interaction effect of gender and socio-economic status on contextual influences of undergraduate students.
  - 4(f) there exists no significant interaction effect of age and socio-economic-status on contextual influences of undergraduate students.
  - 4(g) there exists no significant interaction effect of gender, age and socio-economic status on contextual influences of undergraduate students.
5. There exists no significant difference in academic dishonesty, anomie, personality hardiness and contextual influences of undergraduate students on the basis of region of college campuses.

5(a) there exists no significant difference in academic dishonesty of undergraduate students on the basis of region of college campuses.

5(b) there exists no significant difference in anomie of undergraduate students on the basis of region of college campuses.

5(c) there exists no significant difference in personality hardiness of undergraduate students on the basis of region of college campuses.

5(d) there exists no significant difference in contextual influences of undergraduate students on the basis of region of college campuses.

6. There exists no significant relationship of personality hardiness, anomie and contextual influences with academic dishonesty of undergraduate students.

6(a) there exists no significant relationship between academic dishonesty and anomie of undergraduate students.

6(b) there exists no significant relationship between academic dishonesty and personality hardiness of undergraduate students.

6(c) there exists no significant relationship between academic dishonesty and contextual influences of undergraduate students.

7. Personality hardiness, anomie and contextual influences are not significant predictors of academic dishonesty of undergraduate students.

8. There is no significant contribution of various dimensions of personality hardiness, anomie and contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.

8(a) there is no significant contribution of various dimensions of anomie (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.

8(b) there is no significant contribution of various dimensions of personality hardiness (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.

8(c) there is no significant contribution of various dimensions of contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.



## **1.10 DELIMITATIONS**

Every research investigation is limited in numerous ways. It has to be delimited in terms of population covered, sample selected and scope of variables studied: Keeping in mind paucity of time and resources, present study is delimited to eighteen colleges of Jammu and Kashmir and undergraduate students enrolled in these colleges.

## **1.11 OUTLINE OF THE THESIS**

First chapter of this study introduces academic dishonesty, anomie, personality hardiness and contextual influences and the relationship believed to exist between these concepts. Conceptual definitions are provided and the objectives and hypotheses are presented. Second chapter reviews related research and the significance of the findings. In this chapter a summary is presented about reviews of the literature on academic dishonesty, anomie, personality hardiness and contextual influences and previous research that have tested the relationship between these concepts.

Third chapter includes the methodology to test the hypothetical relationships, differences and predictions introduced in this study. Fourth chapter describes the analytical tests of each of the study hypotheses as well as discussion of the findings of the statistical testing of the hypotheses along with implications of these findings. Fifth chapter summarizes conclusions, recommendations and directions for future research.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

A review of literature is designed to classify allied research, to set the present research project within a theoretical and empirical background. Therefore, studying the associated literature becomes one of the most crucial parts of the research work. It is connection between previous studies and the current research study. It functions as a light house not just with respect to the quantum of work done in the field but also empowers us to identify the gaps in the field of investigation concerned.

#### **2.1 STUDIES RELATED TO ACADEMIC DISHONESTY**

The investigations relating to academic dishonesty are numerous, perhaps in light of the demands of the tasks as well as the prominence of performing well in institutions, studies of academic dishonesty mostly focus on the student population, and however, investigations persist to label and address academically dishonest practices in multiple ways. Consequently, several researchers have examined a wide variety of potential dishonest behaviors, with some focusing on the variety of assignments on which academic dishonest practices occur and others on the diverse approaches of academic dishonesty employed by students. In early studies, Bowers (1964) revealed positive association between student cheating and their perception of peers' attitude toward dishonest academic acts. In an investigation conducted by Baird (1980) various approaches of dishonest behaviours used by learners, were analyzed. When observing at exact dishonest academic practices, outcomes demonstrated that copying someone else's assignment, getting examination information from another learner, plagiarizing, allowing someone to copy work, and exam work copying from someone's were the most regularly reported practices of academic dishonesty.

Taking things a step further, Haines, Diekhoff, LaBeff, and Clark (1986) studied the kind of assignment on which academic dishonesty took place in a sample of three hundred eighty undergraduate students, with findings demonstrating that the most pervasive form of cheating behaviour happened on class assignments (34.2%) followed by examinations (23.7%) and quizzes (22.1%). Regarding examination cheating parallel results were obtained on college students population. Franklyn-Stokes and Newstead (1995) studied one hundred twenty eight students, exploring the most general cheating behaviors to be dishonest by permitting others to copy work

(72%), paraphrasing without references (66%), doing another's coursework (66%) and copying coursework with the other person's knowledge (64%). Similarly, other researchers reported parallel results, with the most common practices encompassing actions such as using hidden or crib notes and copying from others (Davis, Grover, Becker & McGregor, 1992); copying from the online databases i.e., Internet (Dawkins, 2004); copying from other students' examination or making exams accessible for others to copy, getting answers from somebody who has finished the examination, and unacceptably cooperating on a take-home examination (Robinson, Amburgey, Swank, & Faulker, 2004).

Another form of academic dishonesty is plagiarism; researchers regularly gave attention to this phenomenon. Bennett (2005) determined the pervasiveness of the dishonest academic behaviors. In an investigation with three hundred twenty-seven students, reported how commonly they inserted or copied into their work, without appropriate recognition of printed sources, the Internet, or the work of other students. Choices reached from a couple of words or sentences to a complete part of work. Though 46% of learners strongly approved that plagiarism was fundamentally shameful and immoral, 80% had copied a few or couple of words or sentences, 71% had copied numerous sentences, 46% acknowledged to copied a full passage, 31% copied numerous passages, and 25% handed in a whole portion of work that had been copied. Additionally, 53% admitted making up bibliography or references, and 61% collaborated for a course when they were not allowed to do so. However, Ryan, Bonnno, Krass, Scouller, and Smith (2009) exposed that students are not aware about campus rules on plagiarism and academic dishonesty. In India, Kaur (2011) found that majority of students fall in average level of academic cheating in Haryana. In a study conducted by Babu, Joseph, and Sharmila (2011) found that 49% have copied from others record book and 75% students have given proxy for attendance. During a theory exam, 74% of students have copied from their friends, 2% have tried to get the question paper before exam and 5% have influenced their teachers by unfair means to get more marks. During practical exam, 81% have got technical help, and 45% had prior knowledge about the exam.

In an investigation of three hundred sixty five college students, receiving (49%) and giving (58%) examination questions were the most frequent practices of academic dishonesty (Genereux & McLeod, 1995). This investigation also exposed

contextual factors that decrease or increase the frequency of spontaneous and planned academically dishonest behaviors. Instructor's attitude towards dishonesty, test fairness, and other aspects not directly connected to the examination setting was most probable to enhance performance of dishonest academic acts. Only test administration aspects were probably to affect academic dishonesty were vigilance and instructor and spacing of learners in the examination chamber; high watchfulness and far apart spacing reduce the occurrences of frequent performance of dishonest academic acts. Consequently, how learners cheat may depend mostly on situation; nevertheless, other aspects such as the teacher's opinion on academic dishonesty, the magnitude to which results affect economic provision and the association between long-term goals and grades may also affect how learners cheat. Furthermore, Genereux and McLeod (1995) revealed that learners were more probably to help somebody else academic cheating rather than dishonesty for their personal educational achievement. For example, researches proposed that the habit of academic dishonesty obviously starts prior than college (Whitley, 1998). Investigators stated that learners who are involved in academic dishonest practices at the high school level are more probable to report dishonest academic practices at the college level (Harding, Carpenter, Finelli, & Passow, 2004; Rabi, Patton, Fjortoft, & Zgarrick, 2006).

Research studies also proposed that learners' intentions to be involved in performance of dishonest acts mediate the association between prior dishonest practices in high school and college dishonest academic practices (Harding, Mayhew, Finelli, & Carpenter, 2007). Using Ajzen's (1991) 'Theory of Planned Behavior' (TPB), investigators studied the connection between behavior and attitudes and stated that there is a noteworthy positive association between attitude toward academic dishonesty and actual dishonest practices (Bolin, 2004; Haines et al., 1986; Rettinger & Kramer, 2009).

Researchers have begun to give more emphasis to the association between dishonest academic practices and morally appropriate traits of students. For example, researchers found a negative association between greater levels of self-control (Bolin, 2004), aversion to cheating (Vandehey, Diekhoff, & LaBeff, 2007), ethical reasoning (Harding et al., 2007), and academic dishonesty of students. Other scholars have examined the association between religion/religiosity and academic dishonesty and revealed that religious services attendance is found to be negatively connected to

dishonest academic behaviors (Bloodgood, Turnley, & Mudrack, 2008; Storch & Storch, 2002). Similarly, Huelsman, Piroch, & Wasieleski (2006) found negative relationship between academic dishonesty and religiosity. Students, who are attending more frequently religious services, were associated with less engagement in the performance of dishonest academic practices in all the courses (Rettinger & Jordan, 2005). On the other hand, Smith, Davy, Rosenberg, & Haight (2002) reviewed the literature of various research studies and summarized that students with higher performance in academics are less engaged in academic dishonesty as compared to their lower performance counterparts.

Tadesse and Getachew (2010) found that 96.40% of participants admitted in involving on assignment-associated dishonesty while 82.10% on research-associated and 82.00% on exam-associated ones, respectively. This study also found that mastery orientation, cumulative grade point average, awareness of academic rules and regulations, faculty, assessment practices, performance avoidance, and university joined predicted the diverse types of educational dishonesty. Similarly, Brown-Wright et al. (2012) revealed that home-school dissonance significantly predicted on motivation and dishonest academic behaviors. Also, results exposed that a motivation was an important mediator of the association between home-school dissonance and dishonest academic behaviors. Moreover, Huang, Yang, and Chen (2015) showed that students who had less of mastery method and better lenience of dishonest academic acts tended to involve in numerous kinds of dishonest academic practices.

Additionally, Wowra (2007) stipulated that social anxiety was significantly and positively associated with academic dishonesty. Another study conducted by Muhammad and Nazir (2010) found that students' personality traits have a substantial influence on attitudes towards dishonest academic behaviors. Whereas, Kucuktepea (2010) revealed that the negative and significant association was found between self-efficacy perception and tendency for academic dishonesty. Furthermore, Unal (2011) found that ethical judgment levels, genders and accommodations of prospective teachers meaningfully predict their performance of dishonest academic acts whereas no significant effect of universities, departments and class levels of prospective educators was found on their academic dishonesty. Estep and Olson (2011) revealed that the noteworthy association was not found between parental warmth/involvement and attitudes towards infidelity and significant correlation does not exist between

parental warmth/involvement and attitudes towards academic dishonesty. Further, no noteworthy association exists between supervision/strictness and attitudes towards dishonest academic behaviors.

Ellahi, Mushtaq & Khan (2013) found that situational, individual, and moral aspects affect rationalization of dishonest academic behavior and this rationalization forms real practices of educational dishonesty. Meng, Othman, D'Silva, and Omar (2014) exposed that academic dishonesty is positively connected with neutralization of students. Several studies found positive and significant association between academic dishonesty and academic procrastination i.e., delay in college-related activities (Liesera, Wijaya, Natalia, & Hutapea, 2015; Roig & TeTommaso, 1995; Patrzek, Sattler, van Veen, Grunschel, & Fries, 2014). In addition, Okorodudu (2012) found self-efficacy and parental motivation greatly predicted students' academic dishonesty.

## **2.2 ACADEMIC DISHONESTY AND PERSONALITY HARDINESS**

The construct personality hardiness as introduced by Kobasa (1979) is a personality style, and a set of beliefs about self and the world. Personality hardiness has been examined far less in relation to academic dishonesty of students. There are three facets of personality hardiness i.e. control trait, commitment, and challenge tendency. The researchers Grasmick, Tittle, Bursik, and Arneklev (1993) explored that perceived opportunity and self-control was linked to academic dishonest behaviors. The lack of self-control was postulated to be a personality trait that predisposes individuals to involve in academically dishonest practices. Meaning thereby low self-control trait inclines student to engage in dishonest academic behaviors.

In a research on 799 undergraduate college students, Bolin (2004) explored that attitudes toward academic dishonesty completely mediated the association between trait self-control and dishonest academic behaviors. However, self-control trait is not directly connected to performance of dishonest academic acts; it does play a significant role in an undergraduate students' judgment to cheat due to the association between attitude towards dishonest academic practices and self-control. However, one of the most characteristics of normal individual is the capability of control and commitment over their behavior in any conditions which can better

prepared to the students not to do wrongdoing behaviors. Similarly, Hystad, Eid, Laberg, & Johnson (2009) revealed that personality hardiness was significantly and negatively linked with health complaints and academic stress. However, personality hardiness was also moderated the association between educational health and stress. Conversely, Wiemers-Wolfe (2000) exposed significant negative relationship between academic self-control and academic dishonesty.

Regarding self-control, Coskan (2010) found that high susceptibility and low self-control to societal influence act as predictors of student performance of dishonest academic acts. Experimental outcomes discovered that first, cheater frequencies and cheating levels of groups did not vary as a function of ego depletion while they varied as a function of norm orientation in that cheat norm groups had greater levels of dishonest acts and higher occurrences of cheaters than neutral norm and not cheat groups had. On the other hand, students possess low control trait predispose to cheat in regular ways. A number of scholars have noted that low self-control is directly linked to academic dishonesty (Arneklev, Grasmick, Tittle, & Bursik, 1993; Gibbs & Giever, 1995). Moreover, locus of control has also been investigated via experimental studies, though with more reliable findings. Two research investigations summarized that individuals with external locus of control are more probable to involve in dishonest academic practices (Forsyth, Pope, & McMillan, 1985; Leming, 1980).

Additionally, Yesilyurt (2014) emerged that inclinations towards dishonest academic acts, academic locus of control and test anxiety is significant predictors of the teacher candidate's academic self-efficacy. Although, personality hardiness is a set of personal beliefs, Grimes and Rezek (2005) revealed that personal beliefs about the social and moral acceptability of dishonesty are a substantial predictor of dishonest academic behaviors. Chapman, Davis, Toy, & Wright (2004); Tibbetts (1999) revealed that positive associates of cheating intentions include presence of high aggression features, perceived pleasure from cheating, and lack of self-control among students could increase frequency of academic dishonesty in colleges.

Taking things a step further, Rinn & Boazman (2014) found that locus of control is not significant predictor of academic dishonesty for the non-honors groups. But associations were revealed among constructs for the non-honors, honors and aggregate groups. Moreover, Okorodudu (2012) found self-efficacy and parental motivation greatly predicted academic dishonesty of students. In addition, Karim and

Ghavam (2011) discovered that there was a noteworthy association between predictor constructs (self-effectiveness, self-control, and academic performance) with academic dishonesty. Nora and Zhang (2010) exposed that high efficacious students was less involved in performance of dishonest academic practices as compared to students having low self-efficacy. This study also found that peers played important role in discouraging dishonest academic behaviors by expressing disapproval and notifying instructors of cheating behaviours.

A number of relationship studies have examined self-efficacy beliefs in association to dishonest academic behaviors. For example, Murdock et al. (2001) revealed an inverse association between academic dishonesty and academic self-efficacy for students, after controlling for personal goals, classroom goal structures and other facets of the classroom environment. Similarly, an association between academic dishonesty and self-efficacy has been revealed in college population (Finn & Frone, 2004). Other investigators have linked academic dishonesty to numerous emotional arousals like fear of failure, exam anxiety and doubt about one's performance (Anderman & Murdock, 2007), all of which serve as low-efficacy cues or lack of hardiness traits. Students who believe self-confidence about their academic capabilities are more probable to perceive dishonest academic practices as unethical (Elias, 2009). The result of Gentina, Tang, and Gu (2017) exposed that academic commitment controlled academic dishonesty. Conversely, Michaels and Miethe (1989) revealed significant influence of commitment and involvement on dishonest academic behavior (Michaels & Miethe, 1989). Moreover, Błachnio (2019) found that academic dishonesty was negatively related with self-control of students.

### **2.3 ACADEMIC DISHONESTY AND ANOMIE**

The construct of anomie as linked to academic dishonesty has been studied far less and provided the foundation for the current research problem. However, the concept of anomie has been great concern to program formulators. So, little investigation has been prepared to classify influence of student perception of anomie on dishonest academic practices. Study is carried to evaluate the level of perception of anomie and academic dishonesty among undergraduate students. Academic dishonesty arises, from a deterioration of moral values as documented over the past decades by the Josephson institute (Kolanko et al., 2006). However, personality traits, values and personal beliefs play an imperative role with religiosity (Sutton & Huba,



1995) and persons with Type A individuality being less prone to perform dishonest academic practices (Davis et al., 1995). Furthermore, students who engage in academic dishonest acts in all parts of life are due to altering and weakening social norms of right versus wrong. Besides, Calabrese & Cochran (1990) connected social forms of alienation to greater levels of student performance of dishonest academic acts.

On the other hand, society endorses egocentrism and doing whatever it takes to be at the top and ahead of others (Bushweller, 1999). Consequently, the pressure experienced by the undergraduate students to maintain academic achievement has a direct association with tempting them towards committing deviant actions, academic dishonesty (Fawkner & Keremidchieva, 2004). As a result, they rely on unethical behaviors to avoid rejection (Wowra, 2007). Thus, when culture is no longer effective in one's best interest, students openly disrespect societal rules and sanctions (Tshahiridu, 2006). In addition, Caurana et al. (2000); Bashir and Singh (2018) reported a noteworthy and positive relationship between anomie and academic dishonesty of students. Using Srole's scale, anomie research has supported links between increased rates of anomia/anomie and a wide range of socio-psychological factors. For instance, researchers have found that higher frequency of anomie have associated with radical and undesirable change expectancies (Reimanis, 1967), increased guilt and role confusion, reports of unsuccessful conflict resolution (Reimanis, 1974), increased suicide rates among individuals ages 18-24 (Boor, 1979), and higher among lower socio-economic classes (Koenig et al., 1981). Additionally, higher anomie correlated with attitudes of indifference towards fraudulent behavior and unethical retail dispositions (Caruana et al., 2001), greater levels of theft, alcoholism, and academic dishonesty among individuals between 20-25 years of age (Rosenbaum & Kuntze, 2003).

Although, Rhodes (1964) found that individual anomie was more closely associated to occupational aspiration as compared to level of occupational. Teenagers inclined to high level of anomie when there was an extensive difference between opportunity and aspiration for success when their family economic stress is maximized. Carr and Hauser (1976) tried to examine the relationship between anomie and religiosity. They found an inverse association between anomie and social class. Later, Ryan (1981) confirmed a moderately strong negative relationship between

education and individual anomie. He contended that socio-economic-status remained the primary determinants of anomie. Further findings revealed that relationship between anomie and social class was not reduced by religiosity. Channabasavanna and Bhatti (1975) found perception of anomie was significantly associated with educational aspirations and previous achievement. Further, it was found that female students perceive more anomie as compared to male students.

In addition, Ewing (1971) examined relations between observed social behavior, anomie, dogmatism, and personal-social variables. The findings are significant and positive relationship between observed social behavior and tested pre-delinquency, anomie and dogmatism. Sirous and Safar (2009) found significant relationship between anomie behavior of students and family's economy, educational level of parents, family punishment, and family problems. Whereas, Serajzadeh and Pouyafar (2009) revealed that both anomie and deviance have significant direct negative relationships with religiosity. Also, by reducing anomie feelings of people, religiosity has an indirect negative effect on deviance. Among the dimensions of religiosity, the consequential and ritual dimensions have stronger associations with anomie feelings compared to those of belief and feelings dimensions. The comparison of the relationship between different dimensions of religiosity and deviance also shows that consequential dimension has the strongest prohibiting effect on deviance. On the other hand, Sulphey and Jnaneswar (2013) found no significant association between anomie and academic dishonesty among business school students.

In anomic society people might have low habitual patterns of behavior, emotion and thought that separate an individual from others. Other aspects could be lack of trust in higher authority, meaningless life, chaos, confusion regarding rules, moral disruption, low life satisfaction and interpersonal alienation aspects. So, Newhouse (1982) found that more alienated a student is from school-related activities, the more probable is the likelihood for academic dishonest practices. In anomie status individuals feel low standard of life and it largely undermines wellbeing and life satisfaction (Lachman & Weaver, 1998) and it also decreases happiness (Brockmann, Delhey, Welzel, Yuan, 2009). This is because individuals feel hopeless and helpless in their capability to work toward their preferred goals (Elgar, Davis, Wohl, Trites, Zelenski, & Martin, 2011).

Recently, Baharak and Mahmood (2010) revealed that feeling of anomie among students is higher. A noteworthy association was found between the student's socio-economic status and the feeling of anomie. Heydari et al. (2013) investigated the relationships between socio-economic status, feeling of anomie, and illegality or law-breaking behavior and revealed that socio-economic status had significant negative association with feeling of anomie and insignificant association with illegality or law-breaking behavior. Anomie had significant and positive association with illegal behavior and the fetishism of money component had the highest effect on law-breaking behavior or illegality. Yingli, Yongjia, & Henan (2014) showed that academic moral anomie is very common among undergraduates and students attribute it to external reason and social environment's effect is considered to be the most important reason. The education and social learning had a direct influence on misconduct in academia, but the most effect of them was mediated by cognition and attitude.

The research conducted by Obe (2005) revealed poor preparation of students for examination and the compromising attitude of the entire society are responsible for academic dishonesty. However, Egbo (2006) summarized that moral decadence and corruption are the main reasons to increase dishonest academic practices. On the other hand, Gentina, Tang, and Gu (2017) exposed that moral values curbed academic dishonesty among students. Similarly, Kobayashi (2011); Kobayashi and Fukushima (2012) found that belief in legitimacy of the law is a strong constraint to deviant behaviors, specifically dishonest academic practices. More recently, Teymoori et al. (2016) suggested that 'psychological effect of anomie is the failure to satisfy four fundamental human needs including a need for a meaningful life, a need for self-esteem, a need to belong, and a need to have a sense of personal and collective control'. To conclude, anomie feeling of students would develop elements like anxiety-isolation-purposelessness in modern civilized society as it is for the inherent insecurity of a social life.

## **2.4 ACADEMIC DISHONESTY AND CONTEXTUAL INFLUENCES**

A great deal of research and practice has focused on the effect of social support and peer pressure on the social adjustment of undergraduate students. There has been, however, significantly less consideration paid to the joint role of peer group, parental and institutional influence on academic performance, and in particular, the

potential shared effects of parental, peer group and institutional climate (Fass & Tubman, 2002). The contextual environment plays a key role in determining psychological development and behavior (Wise & King, 2008). Perhaps, the family is the most essential social milieu (Bray, Harvey, & Williamson, 1987). It has profound effect on how an individual interacts and behaves with others (Wise & King, 2008). Investigators have reported that social environment influences a person's attitudes, beliefs and judgments (Steinberg & Darling, 1994). In contextual environment, parents and peer jointly affect an individual throughout his life. It enhances well-being, self-esteem, core beliefs, empathy, as well as social maturity and academic amplification (Wilkinson, 2004; Laible, Carlo, & Roesch, 2004; Fass & Tubman, 2002). The natural interaction between two contexts, school and family are frequently used to predict students' achievement (Thompson, Alexander, & Entwisle, 1988; Astone & McLanahan, 1991).

Elements associated to academic dishonesty of students are explored in a deep body of research studies. A common typology of facets linked to academic dishonesty comprises contextual, individual and institutional influences. The outcomes of empirical researches of association are best described as diverse, probable as a significance of the wide difference in methods and scales used in the researches (Brown & Emmett, 2001), the context-dependent nature of academic dishonesty (Kerkvliet & Sigmund, 1999) and ambiguity regarding the collection of activities that may be measured dishonest academic practices (Burrus et al., 2007; Crown & Spiller, 1998). Furthermore, research on student development proposes that three of the most imperative settings in which teenagers are entrenched are the family, peers and institution (Steinberg & Darling, 1994).

Through communications with primary groups of family or friends or anticipated punishment or reinforcement for their actions, but these interactions also expose the individual to social norms which disapprove or approve academic dishonesty. To the extent persons learn these and take them in as their own attitudes, they will hold "definitions" unfavorable or favorable to academic dishonesty. If a description is favorable to a deviant act, the behaviour becomes an approved and acceptable form of actions. To the extent that a student morally disapproves of academic dishonesty, he or she will refrain; the more the student approves of a specific act of academic dishonesty the more probably he or she is to commit it. Other

definitions may be favorable to performance of dishonest academic practices because they serve to neutralize the undesirability of the act and thereby make the act appear to be more excusable or justified in the eyes of the student (Akers, 1985, as cited in Lersch, 1999). During college years it may be substantial to investigate the association between parental constructs and their effect on a person's psychosocial development. Another study analyzed that parents are influential in the career domains of: education expectation, encouragement, vicarious learning, critical life events, and work identity (Fisher & Padmawidjaja, 1999).

Indeed, McCabe et al. (2002) revealed that the best predictor of academic dishonesty was peer related perceptions that their friends cheat. However, Chapman et al. (2004) reported that students regularly overestimated the frequency that other learners involved in several kinds of dishonest academic acts as compared to the incidences with which the learners themselves involved in those same activities. Besides, Pulvers and Diekhoff (1999) summarized that classroom climate is an important contextual variable in academic dishonesty, as both dishonest academic practices and attitudes toward academic dishonesty are associated to perceptions of classroom climate. Similarly, in order to meet parent's expectations, desires and wishes for good grades may cause learners to adopt dishonest academic practices. Researches have revealed that the higher parental pressure on students for performance, the higher the frequency of dishonest behavior will occur (Greene & Saxe, 1992). Likewise, when parental expectations are unrealistic or too high, learners turn to dishonest methods, to achieve positions that meet their parents' expectations (Taylor et al., 2003).

A review study conducted by Whitley (1998) on academic dishonesty research, revealed a very significant association between cheating behavior and subjective norms. Exactly, his analysis of sixteen research investigations that studied societal norms exposed that learners who observe social norms that overlook dishonest activities more than learners who observe societal norms that do not condone dishonest academic behaviors. Nevertheless researcher, McCabe et al. (1997) characterized subjective norms as a situational aspect persuading students' frequency of involving in academically dishonest practices. In their study, McCabe et al. (1997) revealed that contextual aspects comprising peer behavior, peer disapproval and

fraternity/sorority association accounted for 27% of the variance in academic dishonesty.

Similarly, peers played important role in disheartening academic dishonest practices and notifying instructors of academic dishonesty (Nora & Zhang, 2010). These results recommend that academic dishonesty by other learners and perceptions concerning occurrence of academic dishonesty are the bases of norms concerning student performance of dishonest academic acts. Furthermore, these results propose potential conflict between perceived social norms and attitudes toward dishonest behavior and suggest that the important predictor of behavior, as revealed in numerous Theory of Planned Behaviour (TPB) researches, is perceived behavioral control. Although most investigators have characterized norms and their bases as contextual constructs, Stone et al. (2007) claimed that classifying contextual constructs as the subjective norms of the Theory of Planned Behaviour (TPB) model is a more parsimonious and heuristically valued method.

With regarding to classroom climate, Cizek (1999) provides detailed examination of the literature on academic dishonesty. He noted that when classes are small, students are less probable to cheat. Similarly, when classroom environment are favorable to effective learning, when educational task and examinations are relevant and clear, and when instructors take steps to stop dishonest academic practices. Other components that frequently are applied at the classroom that are often associated to lower frequency of dishonest behavior comprise the practice of honor codes (McCabe & Trevino, 2002), the procedure of forced classroom-control methods (Houser, 1982), and the confidence that the learner will not be trapped (Whitley, 1998).

Additionally, educators can affect the pervasiveness of academic dishonesty through the means they discourage or encourage learners from involving in effective study habits. For instance, students who study in under poor circumstances are more probably to cheat as compared to learners who study in more positive settings as demonstrated by Whitley (1998) in his meta-analysis on academic dishonesty. However, Gallant (2008) found that the influence of peer environment on academic dishonesty was more than that of organizational norms.

Furthermore, research on classroom climate recommended that performance of dishonest acts of student can be meaningfully removed if staff of institute dedicates

their consideration to academic dishonesty and obviously converse what constitutes dishonest academic behaviors in their classroom (Beasley, 2014; Gallant, 2008). Whereas, if learners observe staff members are tolerant toward academic dishonesty or display slight concentration in educational integrity, student educational dishonesty is more probable to happen (Gallant, 2008; Lang, 2013; Liebler, 2015).

Lang (2013) argued that teachers who develop interesting learning environment that develop students fascination and interest in the subject matter and realize the applicability of the subject matter for their futures or lives decreases the contextual aspects that lead to decrease academic dishonesty. Study showed that several faculty 'do little or nothing' to react to such activities (Schmelkin, Gilbert, Spencer, Pincus, & Silva, 2008). Various faculties understood that the effort and time to report student dishonest behaviors through 'recognized channels are just not value it' (McCabe et al., 2012). Yu, Glanzer, Sriram, Johnson, and Moore (2016) presented an extensive summary of college students on academic dishonesty. The results of the study are age, gender, self-control, family financial background, life purpose, individual college experiences and peer environment, organizational context, are all important elements related with academic dishonesty. More significantly, extracurricular activities, academic preparation, attitude toward academic dishonesty, and perceived opportunities are significant mediating constructs between academic dishonesty and lack of self-control of college students.

The results of Boysen (2007) showed that the classroom environment is significantly connected to academic dishonesty; the more constructive the classroom climate, the less students will cheat. Recently, Bassey, and Iruoje (2016) revealed that test anxiety, attitude to schooling, parental influence, and peer pressure are significant predictors of students' academically dishonest behaviors. It can be concluded that students who possessed high peer and parental influence were more predisposed toward cheating in examination. Similarly, Sarita and Dahiya (2015) envisage that pressure from parents, teachers and peers may contribute to academic dishonesty. Likewise, Lin and Wen (2007) exposed that students who are extremely pressured by family, task commitment or time aspects are more probable to self-report plagiarism actions.

Recently, Kant (2016) found significant and positive relationship between academic dishonesty and peer pressure of senior secondary school students. On the

other hand, Ghanem & Mozahem (2019) found that perception plays a vital role in describing the activities of students. The more that student notices that others are involving in a certain behavior, the greater the likelihood that they will involve in the activities, even if they believe that this practice constitutes academic dishonesty. Gentina, Tang, and Gu (2017) exposed that peer involvement enhanced cheating behavior and cheating perception among students. Conversely, Yang, Chiang, and Huang (2017) discovered perception of peer academic dishonesty was significant variable in respect of predicting self-reported personal academic dishonesty. Pressure from parents on their children is also a contributing factor to academic dishonesty (Kleiner & Lord, 1999; Quraishi & Aziz, 2017). When comparing themselves to their siblings or other peers, a fear of failure may overcome them (Murdock et al., 2001). The findings of Weiss, Gilbert, Giordano, and Davis (1993) revealed that grade orientation was positively associated with higher academic dishonesty of students.

Notably, perceived faculty dishonesty or faculty-student interaction exerted a significant influence on academically dishonest practices of students. The results of Teodorescu and Andrei (2009) summarized that faculty influence student dishonest academic acts in a significant manner is via the perceived quality and relevance of the courses they teach. As satisfaction with instruction declines, students may well devalue it, making it easier to justify cheating. Chaminuka and Nudzio (2014) recognized fear of failure and inadequate preparation for examinations, shortages of learning and teaching resources among other factors as possible causes of higher frequency of academic dishonesty. Similarly, Bassey and Iruoje (2016); Oyama (2009) found that instructional facilities have significant influence on students' performance of dishonest academic practices during examination.

As can be ascertained from the summary, elements in all three comprehensive groups outlined in the theoretical background have been revealed to be connected with academic dishonesty of students: (a) organizational context/climate (b) parental influence (c) peer influence. As per se, Taylor, Pogrebin, and Dodge (2003) the force to do well comes from four diverse sources: a) self-created pressures (Mazar, Amir, & Ariely, 2008), b) family and parental pressures, c) peer pressures (Carrell, Malmstrom, & West, 2008; McCabe and Trevino, 1993), and, d) academic environment pressures. Other possible reasons have been traced such as prior cheating behavior, lack of respect for authority, time management problems, perceived



pleasure from academic dishonesty and peer pressure i.e., pressure comes from peers (Buckley, Wiese, & Harvey, 1998; Chapman, Davis, Toy, & Wright, 2004; Park, 2003; Payne & Nantz, 1994; Tibbetts, 1999).

The snapshot regarding academic dishonesty in Jammu and Kashmir provided some incidences in academic institutions. Furthermore, the mass media coverage of educational community incidences illustrated an important historical perspective to this era and showed how media coverage draws attention to academic dishonesty and creates pressure on school/college/university officials to curb it. Therefore, the understanding and highlights of the factors that affect student's decisions to involve in academic dishonesty is vital for academic institutions, in order to diminish its occurrence in colleges of Jammu and Kashmir. The worst scandals like Board of Professional Entrance Examinations (Greater Kashmir, Nov 20, 2013) and Dubious Degree's row of teachers. The education department of Jammu and Kashmir has orders verification of certificates (Kashmir News Service, 9, August, 2015) of teachers issued by shady institutions. Moreover, "J-K teacher fails to write essay on cow in High Court's mock test" (Rising Kashmir, May 16, 2015; The Tribune, May 17, 2015) and "Mass Cheating of Jammu and Kashmir service selection board (J&K SSB) examinations" (Kashmir Observer, Dec, 26, 2015). The examination of J&K SSB was cancelled due to mass cheating and group photos were uploaded in social networking sites (J&K SSB, March, 03, 2016). There are other factors which could impact on student's trust i.e., negligence of university authorities. In one case university sends question paper through WhatsAap (Rising Kashmir, 19, February, 2017. To add, the modern history of Jammu and Kashmir tells us a story of a region in a constant mode of change, with events such as Dogra rule (1846-1947), insurgency in 1989 and Kargil war in 1999. In past several decades alone, Jammu and Kashmir goes through dramatic structural changes and societal changes. In the past two decades, the region has witnessed to a lot of violence (Sehgal, 2011). The above highlights give us an insight regarding academic dishonesty in educational community and anomie in society of Jammu and Kashmir.

The summary of review of literature suggests that there are a number of aspects that can influence student involvement in academic dishonesty. Studies have revealed that student performance of dishonest academic acts portend severe consequences for students, institutions, and society (Gallant & Drinan, 2006). The

costs of disregarding this problem are gigantic (Kidwell et al., 2003). The college performance of dishonest academic practices are more probably to cheat on the workplace i.e. job (Swift & Nonis, 1998); and perpetuate the similar immoral behaviors at future work places (Harding et al., 2004). Also, academic dishonesty brings about propagation of unskilled graduates at work marketplaces (Harding et al., 2004). This leads to reduce self-esteem of learners (Lambert et al., 2003; Kelly et al., 2008), and may accordingly spoil the image of an educational organization (Whitley & Keith-Spiegel, 2002). It could also cause loss of value for higher education (Harding et al., 2004). Worse still, performance of dishonest academic acts may effect in severe physical and intellectual hurt to others and cause the young people to upsurge vigorous attention in more venal performance of dishonest academic practices of all forms (Petress, 2003).

Since over the years, scholars have invested rigorous efforts on the frequency of academic dishonesty among students' population (McCabe et al., 2001; McCabe & Trevino, 1993), causes of academic dishonesty (McCabe et al., 1999; 2001), the demographic associates of students who cheat (Whitley, 1998; Wideman, 2008), the motivations/rationales for academic dishonesty (Ajzen, 1991; Whitley & Keith-Spiegel, 2002), methods of cheating (McCabe & Bowers, 1996), honor codes (Prenshaw et al., 2001; McCabe, 2001), and intervention strategies (Aluede et al., 2006).

The results from the established studies come out to be unanimous on the point that performance of dishonest academic acts occurs at an alarming rate in educational institutions of higher education (Wideman, 2008). Most reports in this direction maintain that as low as 40%, and as high as 90% of their investigated populations have involved in performance of dishonest academic practices (McCabe et al., 2001). On the another side, researches on causes of academic dishonesty have recognized factors such as institutional deficiencies (McCabe, 1993; 2005), absence of academic honesty policies or honor codes (McCabe & Trevino, 1993), individuals with external locus of control are more probable to involve in academic dishonesty (Forsyth, Pope & McMillan, 1985; Karabenick & Srull, 1978; Leming, 1980), Faculty's unconcerned attitude (McCabe, 1993; 2005), poor implementation of honor codes or academic integrity policies (McCabe, 2005; McCabe et al., 1999).

Additionally, the research studies are replete with information on rationales/motivations for students' performance of dishonest academic acts. Some of the findings in this regard include components such as predisposition for high marks or aspiration to pass (Odunayo & Olujuwon, 2010), academic procrastination i.e., delay in school-related activities (Liesera et al., 2015; Roig & TeTommaso, 1995; Patrzek, Sattler, van Veen, Grunschel, & Fries, 2014); lack of self-control (Grasmick, Tittle, Bursik, & Arneklev, (1993), feeling of anomie (Caurana et al., 2000; Bashir & Singh, 2018), determinants of academic dishonesty (Gire & Williams, 2007; Iyer & Eastman, 2006; Gardner, Roper, Gonzalez, & Simpson, 1988; Kennedy, Nowak, Raghuraman, Thomas, & Davis, 2000; Underwood & Szabo, 2003), and deterrents of academic dishonesty like classroom techniques (Marcoux, 2002; Gearhart, 2001; Rabi, Patton, Fjortoft & Zgarrick, 2006; Olt, 2002), low self-efficacy (Nora & Zhang, 2016), societal influences such as high emphasis on certificate (Wideman, 2008; Odunayo & Olujuwon, 2010), aspiration to level the "playing field" (McCabe et al., 2001, 2002; Kelly et al., 2008), financial concerns such as aspiration for a high-paid job (Wideman, 2008; McCabe et al., 2001; Whitley, 1998), ignorance of what constitutes dishonest academic practices (Petress, 2003; McCabe et al., 2001; McCabe, 1993), peer influence (Whitley, 1998; McCabe et al., 2001; McCabe & Trevino, 1993), favorable disposition of the academic environment to academic dishonesty (Nadelson, 2007; Whitley, 1998; Levy & Rakovski, 2006), corruption in educational system (Whitley, 1998; Odunayo & Olujuwon, 2010), complicated academic workload (Kelly et al., 2008), competitive school settings (Taylor et al., 2003); students' belief of achievement (Whitley, 1998) and fear of failure (Schab, 1991); to achieve scores that meet their parents' expectations i.e. parental influence (Taylor et. al., 2003) and so on. These investigates have shed light on some of the diverse difficulties facing the college/university community, but have yet to come up with a permanent solution to the problem.

## **CHAPTER III**

### **METHOD AND PROCEDURE**

Preceding chapter deals with the formulation of the research problem in light of theoretical and research background. Method and procedure is one of the most substantial parts of a research. It is core heart to the research work, to proceed with systematic research, right methodology is necessary, as it gives right direction to the research. Thus, the research methodology helps the investigator in testing the hypotheses by getting valid and objective conclusions regarding the relationship between independent and dependent variables. It should be adequate, valid and reliable. This chapter presents the participants, instrumentation, and procedures followed for the study's quantitative data collection and analyses, addressing the rationale, means of selection, and parameters of the target sample population; design, testing, and validation of the tools employed; and steps taken for the study's quantitative data collection and analysis.

- ❖ Research Design
- ❖ Sampling
- ❖ Tools
- ❖ Procedure of Data Collection
- ❖ Statistical Technique

#### **3.1 RESEARCH DESIGN**

The research design is a fundamental facet of any research project. It is the blueprint upon which any research is based. It encompasses of pre-established plan and procedure for obtaining required information, the way through which it is processed and presented as results, in order to address the research problems. Thus, research design refers to as a sequence of stages taken ahead of time to ensure that the pertinent data will be collected in a way that permits objective examination of generated hypotheses with respect to the research problem. In fact, it is the comprehensive process of testing the hypotheses and examining the obtained data. Although there are a number of research designs, the present study is based on descriptive research design. The study also seeks to find the causal relationship between the variables as well as evaluate the best predictors of dependent variable.

## **3.2 SAMPLING**

The quality of a piece of research falls or stands not only by the suitability of instrumentation and methodology but also by the appropriateness of the sampling approach that has been employed (Cohen, Manion, & Morrison, 2007). Generally, in behavioral sciences, to study the entire population is somewhat difficult. Investigators must take decisions early regarding sampling in the total planning of a piece of research. Factors such as expenditure, time, and availability frequently prevent investigators from gaining evidence from the whole population. Consequently, they often need to be able to get data from a smaller group or subset of the population in such a way that the information gained is representative of the total population under study (Cohen et al., 2007). The rationale, means of selection, and parameters of the target sample population as a specific cohort of the undergraduate population; steps taken for the study's quantitative data collection and procedure are given below in detail.

### **POPULATION**

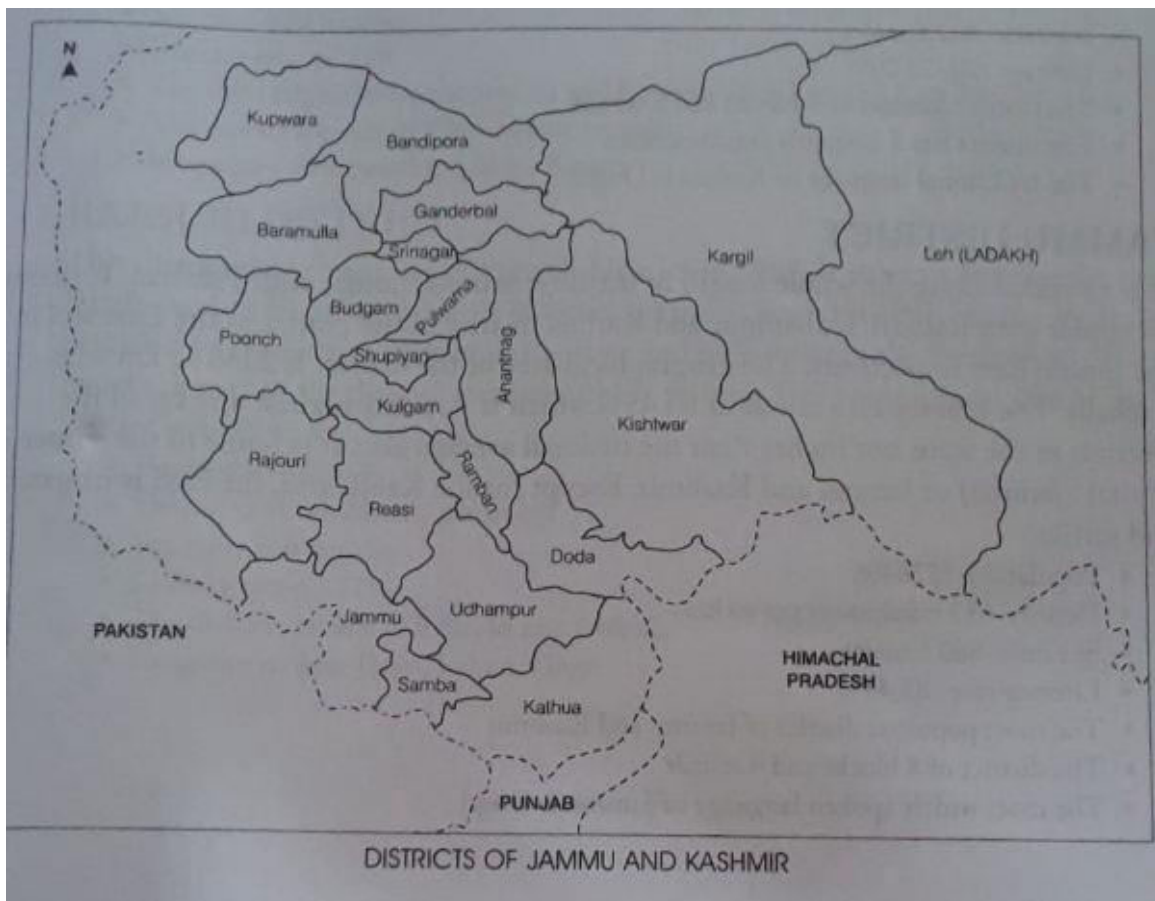
A group of persons who have similar characteristics is known as population. For this study, all undergraduate students would make up the population of the study. So, students having some shared defining characteristics that the investigator can classify and study are called target population (sampling frame) (Creswell, 2008). The following figure highlights the targeted regions/districts of Jammu and Kashmir. From these regions several colleges were selected to get representative sample. The Figure 3.1 demonstrating various districts of Jammu and Kashmir.

### **TARGET POPULATION**

Within this target population, investigator chose a sample for present study. A sample is a subgroup of the target population that the investigator plans to study for generalizing about the target population (Creswell, 2008). In an ideal situation, investigator had selected a sample of undergraduate students who are representative of the entire population. In this study probability sampling were preferred, because the investigator chose participants from the population who are representative of the population (Creswell, 2008). Moreover, stratified sampling technique was used to select appropriate sample in this study. In stratified sampling, investigator divided the population on some definite characteristics and then, using simple random sampling

technique. This assurance that the sample encompasses specific features that the investigator wants comprised in the sample (Creswell, 2008). This method has some profits as related to simple random technique like selection of almost equal proportion from all subsections. The following paragraph highlights the selection of sample through stratified sampling technique.

**FIGURE 3.1**  
**GRAPHICAL REPRESENTATION OF VARIOUS DISTRICTS OF JAMMU AND KASHMIR**



**SOURCE:** Know your state Jammu and Kashmir (pp. 201)

For this study, the target participant student population was comprised of students who are pursuing undergraduate courses from different colleges affiliated with two large state universities of Jammu and Kashmir i.e., University of Jammu and University of Kashmir was selected via stratified random sampling. The reason for selection of this type of sampling has adequate logical buttress. First, two divisions of Jammu and Kashmir i.e., Jammu division and Kashmir division (strata) was selected for getting valid generalized results. Second, as per geographical categorization

Kashmir division is divided into three parts i.e., Central Kashmir, South Kashmir and North Kashmir. On the other hand, Jammu division is divided into three geographical parts i.e., Jammu region, Chenab Valley and Peer Panjal range. Thirdly, among these two selected universities affiliated colleges were selected randomly. Fourth, among all these geographical subsets three colleges were selected randomly from each stratum for getting representative sample. Fifth, due to this type of sampling 18 colleges from 16 districts (total districts of Jammu and Kashmir = 22) were chosen. For the present study, the list of colleges was collected from Website of University of Jammu and University of Kashmir. Both universities have approximately 84 affiliated colleges (42 for each university).

### **SAMPLE SIZE**

While choosing respondents for this study, it is substantial to decide the size of the sample that is needed. Creswell (2008) recommended that a general rule of thumb is to select as large a sample as possible from the population. For this investigation a sample of 1170 undergraduate students from eighteen campuses has been chosen via convenient sampling technique. Several reasons would be adequate to support this type of sampling approach. Panneerselvam (2011) said that the researcher can choose sampling at their convenience because many respondents do not cooperate, some refuse to answer and some respondents either do not return the questionnaire or return an incomplete one. Whereas, Ahuja (2014) said in research situations where appropriate list of the respondents is not available probability sampling will be difficult and inappropriate. In addition, Koul (2009) noted that convenient sampling gives opportunity to respondents, willingly to cooperate, and are easily to answer the questionnaire or return a complete one. Initially, questionnaires were distributed (100 per college) in eighteen selected colleges. Out of 1800 questionnaires 1352 questionnaires were returned from undergraduate students. The questionnaires were then systematically checked for completeness, participants' disengagement, outliers and missing values as recommended by (Hair, Black, Babin, & Anderson, 2010). 182 questionnaires got discarded during screening process. The cleaned data set consisted of 1170 responses giving a response rate of 65% and the procedure of data screening is also comprehensively reported in analysis and interpretation chapter. The investigator obtained the approximate population size i.e. 65200 students from higher education department of Jammu and Kashmir. For further verification, infinite

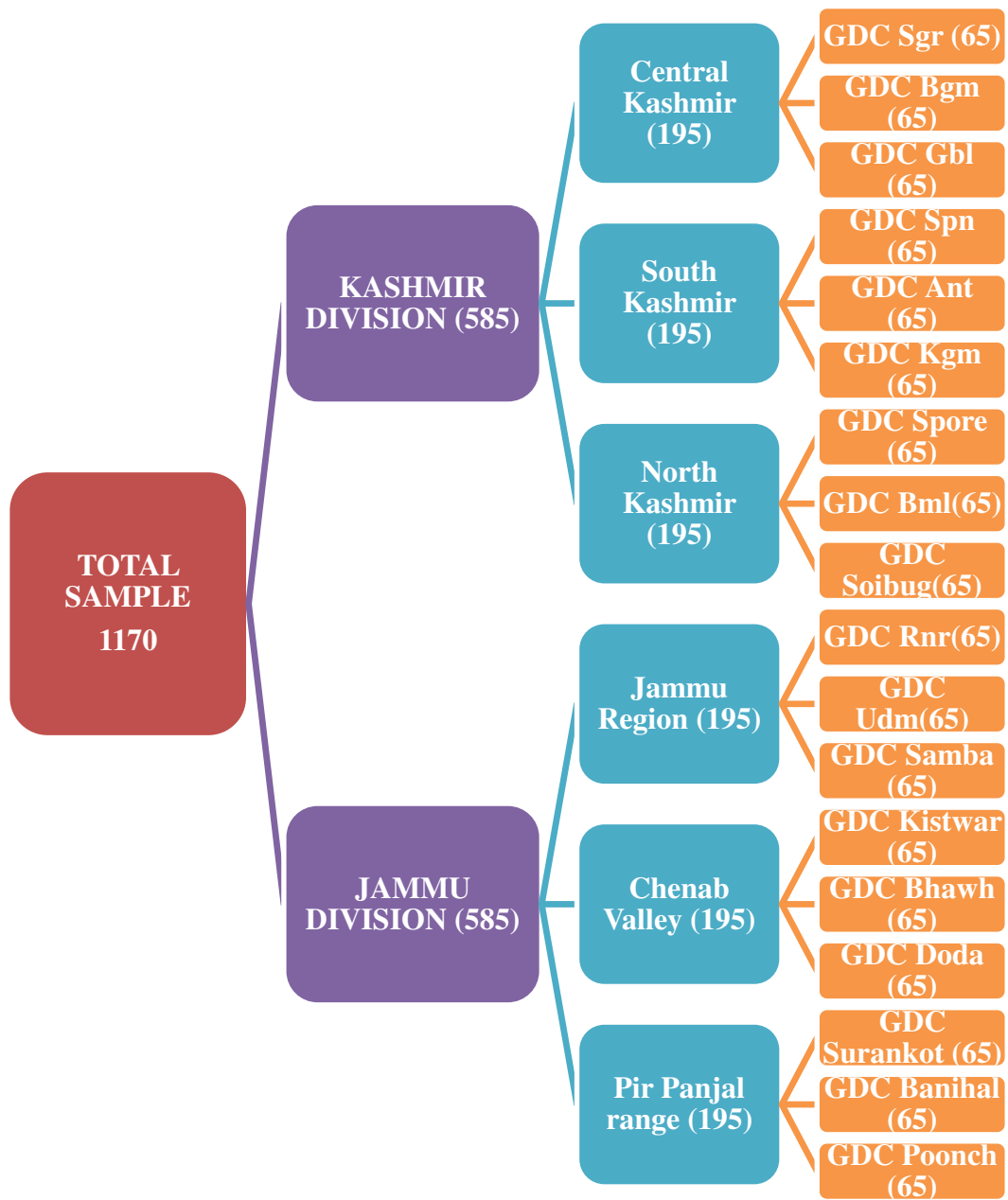
population method recommended by Cochran (1977) was performed which indicates that sample size i.e. 1170 is sufficient in the present study. The sample size for the present study was calculated with online sample size calculator to be 1170 which constitutes almost 3% of the total population. Barlett, Kotrlik, and Higgins (2001 p. 48) reported a sample size of 1170 is sufficient up-to the population size of 65200 respondents at 0.05 level of confidence.

**TABLE 3.1**  
**THE LIST OF COLLEGES ALONG WITH NUMBER OF**  
**UNDERGRADUATE STUDENTS OF DIFFERENT REGIONS**

<b>Region</b>	<b>S. No</b>	<b>Name of the College</b>	<b>Number of students</b>
South Kashmir	1	Government Degree College, Kulgam	65
	2	Government Degree College, Shopian	65
	3	Government Degree College, Anantnag	65
Total			195
North Kashmir	4	Government Degree College, Baramulla	65
	5	Government Degree College, Sopore	65
	6	Government Degree College, Soibug	65
Total			195
Central Kashmir	7	Government Degree College, Budgam	65
	8	Government Degree College, Srinagar	65
	9	Government Degree College, Ganderbal	65
Total			195
Chenab Valley	10	Government Degree College, Surankot	65
	11	Government Degree College, Banihal	65
	12	Government Degree College, Poonch	65
Total			195
Jammu region	13	Government Degree College, Ramnagar	65
	14	Government Degree College, Samba	65
	15	Government Degree College, Udhampur	65
Total			195
Peer Panjal range	16	Government Degree College, Kistwar	65
	17	Government Degree College, Bhaderwah	65
	18	Government Degree College, Doda	65
Total			195
<b>Total Sample</b>			<b>1170</b>



**FIGURE: 3.2 DISTRIBUTION OF THE SAMPLE**



### 3.3 TOOLS USED

The data gathering tools used in this study comprised of four separate survey instruments. For quantitative data collection and analyses, there are numerous methods and research instruments/measurements available for collecting information from the respondents on designated constructs. In the present investigation Likert scales has been used in order to collect the required information, it is found to be most reliable and valid technique. For a particular study, the selection of tests/tools is based on certain criteria like nature of objectives, type of sample, appropriateness of tools,

feasibility of time and competence of the researcher. Keeping these criteria in mind the researcher used following different research instruments to measure the research constructs.

3.3.1 *Academic Dishonesty Scale (ADS)*

3.3.2 *Anomie Scale (AS)*

3.3.3 *Contextual Influences Scale (CIS)*

3.3.4 *Personality Hardiness Scale (PHS)*

The details of the four research instruments used by the investigator are as follows:

### **3.3.1 DESCRIPTION OF ACADEMIC DISHONESTY SCALE**

Academic Dishonesty Scale was developed and standardized by the investigator. It was developed to measure the level of academic dishonesty among undergraduate students. The development and validation of the scale was carried out by adopting highly acceptable and renowned scale development procedures. The comprehensive details regarding scale construction and psychometric analysis are given below in sequence.

#### **• NEED FOR SCALE DEVELOPMENT**

In previous studies of academic context, it is pertinent that numerous scales have been developed to examine academic dishonesty. Although, much is left undone about psychometric properties of most prior scales of academic dishonesty. As a result, conclusions/findings of those investigations are treated with cautions. However, as Imran and Nordin (2013) pointed out, most of the scales lacked proof of solid psychometric properties and their dimensionalities were not thoroughly investigated. This further contributes to high discrepancies in the conclusion for occurrence of academic dishonesty (Nelson & Shaefer, 1986).

One of the most frequently used instrument is academic dishonesty scale with twelve statements, on a five point Likert format ranging on a 1 to (never) to five (many times) scale (McCabe & Trevino, 1993). This measure has been used in numerous studies as well as McCabe and Trevino (1997); Chapman et al. (2004); McCabe, Trevino and Butterfield (2001) or incorporated extra items (Brown, 1995; 1996; 2000; Bolin, 2004; Iyer & Eastman, 2008; Kidwell et al., 2003). Despite its wider applicability in the academic dishonesty literature, the psychometric properties have not been systematically investigated. Apart from a token of explanation on

reliability coefficient, no further information on development and validation was provided (either through the exploratory and/or confirmatory factor analysis (Adesile, Nordin, Kazmi, & Hussien, 2016; Iyer & Eastman, 2006). Neither Brown (1996; 2000) nor Kidwell et al. (2003) reported any factor structure or reliability on the items (Iyer & Eastman (2006).

Notwithstanding its deficiency, Iyer and Eastman (2006) adapted the McCabe and Trevino's (1993) scale. The adapted statements were said to be alike with those in Brown's (1996; 2000) and Kidwell et al. (2003) studies. Like in McCabe and Trevino (1993), a five-point scale ranging from (5 = many times to 1 = never) was adapted. Even though it was asserted that Multitraits Multimethods (MTMM) investigation was used to ascertain discriminant and convergent validity of the measure, there was no solid proof concerning this examination. The present measurement seeks to uncover the academic dishonesty research, address the lack of thorough examination of moral issues in educational endeavors in India and validate academic dishonesty scale for undergraduate students.

- **METHOD**

Keeping in mind the objectives of the study, scale development approach was used to develop an instrument that sufficiently measures the academic dishonesty of undergraduate students. The procedures were as follows (i) definition of the construct intended to be measured (ii) generation of an item pool (iii) expert views on initial item pool (iv) refinement and validation of the scale (v) evaluation of the scale (DeVellis, 2016; Netemeyer, Bearden, & Sharma, 2003; Worthington & Whittaker, 2006; Wymer & Alves, 2012).

### **SCALE CONSTRUCTION AND PSYCHOMETRIC ANALYSIS**

In this investigation rigorous literature was studied in order to develop a highly reliable and valid scale. In initial stage, item generation was based on theoretical model; investigator developed statements related to academic dishonesty in Indian scenario. The generated statements were intended to capture academic dishonesty of undergraduate students. In initial stage, 52 statements were generated by the investigator. It was essential to develop the robust psychometric properties of an academic dishonesty scale as well as dimensionality. Therefore, summated evaluation method proposed by Likert (1932) has been used for developing present scale. Likert

scaling is commonly used tool measuring beliefs, options and attitudes. It is frequently helpful for these items to be literally strong when used in a Likert format (DeVellis, 2016). Therefore the present scale comprised 5-point Likert format, each statement is rated on five sequential points, (always=4, frequently=3, sometimes=2, rarely=1 and never=0).

- **CONTENT VALIDITY**

After preparing the item pool, the face and content validity was qualitatively performed with the involvement of sixteen experts who hold doctorates in the field of education and psychology with a request to suggest any ambiguity, vagueness or dual meaning coming from any statement. An expert judgement is a general procedure of item construction (DeVellis, 2016; Netemeyer, Bearden, & Sharma, 2003). For qualitative analysis, 52 statements were formulated and the entire group of statements was submitted to content experts, which included both academic dishonesty scale and instructions to assess content and organization of measurement.

#### **QUALITATIVE ASSESSMENT OF CONTENT VALIDITY**

An outline of qualitative assessment criteria as recommended by McKenzie, Wood, Kotecki, Clark, and Brey (1999) was based on these components: (a) Are the directions clear? If no, please explain. (b) Are the directions concise? If no, please explain. (c) Are the directions complete? If no, please explain. (d) Are the items suitable? If no, please explain. (e) Are the items clear? If no, please explain. (f) Would you revise any item(s)? If yes, please explain. (g) Do you recommend deleting an item(s)? If yes, please explain. (h) Do you recommend adding an item(s)? If yes, please explain. (i) Other comments? All of the experts' comments were analyzed, and proper modifications were made to improve the overall quality of the scale.

#### **QUANTITATIVE ASSESSMENT OF CONTENT VALIDITY**

After completion of revisions of the qualitative reviews, a quantitative assessment packet was submitted to each expert. An assessment tool consisting of three items was used in order to analyze the expert viewpoints. Experts were asked to rate the appropriateness of each item by stating if each item was “essential”, “useful but not essential” or “not necessary”. Table 3.2 presents an outline of the quantitative assessment of scale items.

**TABLE 3.2**  
**EXAMPLE OF QUANTITATIVE ASSESSMENT**

Item	Rating*		
During examination I use signals to fetch answers from my friends.	1	2	3

\*1=essential, 2=useful but not essential, 3=not necessary

By combining all the assessment tools as one assessment tool, the issue of how many experts approved each possible option of the items was determined. In this perspective, the content validity of the statements was determined with the “ $CVR = (N_e - N/2) / (N/2)$ ” where  $CVR =$  Content Validity Ratio,  $N_e =$  Number of subject matter experts panelists indicating item essential and  $N =$  Total number of Subject Matter Experts (SME) panelists (Lawshe, 1975). Table 3.3 highlights item-wise content validity ratio’s and significant items for academic dishonesty scale.

**TABLE 3.3**  
**ITEM-WISE CONTENT VALIDITY RATIOS (CVRs)**  
**FOR ACADEMIC DISHONESTY SCALE**

S.N.	Item	CVR	S.N.	Item	CVR
01	To complete my home/lab-work.	1.00	02	In my name after getting it prepared by my friends.	1.00
03	So that classmates do not get required content.	1.00	04	Assistance during examination.	1.00
05	I manually pass answers to another student.	0.75	06	Educational assignment more than one time.	0.87
07	Fetch answers from my friends.	1.00	08	Electronic devices during examination.	1.00
09	Other student in examination room.	1.00	10	Handover to my classmates.	1.00
11	I help someone to cheat.	1.00	12	I allow another student to copy my homework.	1.00
13	In examination, I don’t report to the examiner.	1.00	14	I try to copy from another student.	1.00
15	When I miss deadline of my educational project.	1.00	16	To use printed texts, such as projects assignments etc.,	0.87
17	Special considerations to attain or getting favours i.e. (bribery).	0.87	18	I try to know questions asked in paper.	0.87

19	I take help from others to complete it.	0.87	20	Obtain information about the content of the test before it was given.	0.87
21	I receive unauthorized help.	1.00	22	Textbook & claim it as completed by me.	1.00
23	I provide answer on behalf of another student during class.	1.00	24	I consult teacher for guess.	1.00
25	I manipulate scientific information on internet and claim it as written by me.	1.00	26	few sentences/lines/words and phrases from other sources	1.00
27	Personal educational assignment/project without citing the author.	1.00	28	On table/wall/hand/paper etc. in prior time.	1.00
29	Seat near efficient student to get better grade in examination.	1.00	30	I submit my senior's term paper under my name.	1.00
31	I share my assignments with other students	1.00	32	I pay someone to write a paper/homework for me.	0.75
33	Other classmates to do cheating.	0.87	34	I visit teacher to influence my grades.	1.00
35	Homework are readymade available	0.75	36	Who has already attended a test.	1.00
37	Project/assignment/paper online & submit it as my individual effort.	1.00	38	False excuses to teacher, to gain extra time on project/assignment.	1.00

**Note:** items were not statistically significant and were excluded from the final scale.

The minimum values of content validity ratio's (CVR) at  $\alpha = .05$  significance level is used for an expert viewpoints as recommended by (Lawshe, 1975). Content validity calculations based on sixteen expert opinions of the academic dishonesty scale were analyzed. Therefore, to provide significance statistically according to expert numbers, for 16 experts 0.49 value was used as the Content Validity Criterion (CVC). However, retained items obtained CVR value at or above 0.75 in this assessment. Moreover, item having CVR values below content validity criterion were excluded from the final scale. Quantitative expert views were analyzed and 13 statements were deleted and further 38 items were retained to perform the exploratory factor analysis. The Table 3.4 indicates description of CVR and expert opinion number as recommended by (Lawshe, 1975).

**TABLE 3.4****MINIMUM VALUES OF CONTENT VALIDITY RATIO (CVR)  
ACCORDING TO EXPERT OPINION NUMBER**

<b>Number of Expert</b>	<b>Min. Value</b>	<b>Number of Expert</b>	<b>Min. Value</b>	<b>Number of Expert</b>	<b>Min. Value</b>
5	0.99	10	0.62	15	0.49
6	0.99	11	0.59	20	0.42
7	0.99	12	0.56	25	0.37
8	0.75	13	0.54	30	0.33
9	0.78	14	0.51	35	0.31

**• EXPLORATORY FACTOR ANALYSIS**

In order to test the reliability and validity of the academic dishonesty scale, it was pre-applied to 450 undergraduate students. Kaiser-Meyer-Olkin (KMO) and Barlett Sphericity tests were applied to determine whether the 38-item scale fit the factor analysis or not. Subsequently, several series of iterative cycles of factor analysis were performed on the data set. The overall variance explained and numbers of elements extracted were inspected after each iteration. Components with low communalities and which didn't correlate were deleted with the aim of improving the factor structure so that to get a matrix with much clear loadings. The Kaiser-Meyer-Olkin (KMO) value, which is used to determine whether the data and the sampling size are adequate and suitable for the selected analysis, was found to be .849.

In addition, the Barlett Sphericity test, which is used to check whether the data come from multi-variate normal distribution or not, was applied and the result was found to be significant (Chi-square = 2610.357,  $p < .01$ ). It is necessary that the KMO measurement test result is .60 and over, and the result of the Barlett Sphericity test is statistically significant (the minimum acceptable coefficient is .60; Tabachnick & Fidell, 1996). Since the values obtained as a result of the above mentioned analysis fit the basic hypotheses at a good level, it was decided that the factor analysis could be conducted (Kothari & Garg, 2014).

**TABLE 3.5****KMO AND BARTLETT'S TEST OF SPHERICITY**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.849
	Approx. Chi-Square	2610.357
Bartlett's Test of Sphericity	Df	253
	Sig.	.000

Since the factor loadings show the correlation between the item to be measured and the main structure, the relevant dimensions that appeared as a result of the basic component analysis and the factor loads were examined. After these processes, the last form of the academic dishonesty was given as 23 items. The rotated components matrix, which was converted with Varimax method, and which was obtained as a result of the exploratory factor analysis, is given below. The Varimax method, which is one of the vertical rotating methods, was preferred in order to ensure that the factor variances would have high value with a few variables. The factor analysis revealed a six factor structure, explaining 55.67% of the variance (Acceptable variance is 50%; Streiner, 1994), and all items had loading above .40 (Acceptable item loading of sample 350 is 0.40; Heir et al., 2010). The first factor consisted of items associated to cheating in examination (5 items), second factor consisted of items associated to plagiarism (4 items), third factor associated to outside help (4 items), fourth factor associated to prior cheating (3 items), the fifth factor associated to falsification (3 items), and sixth factor associated to lying about academic assignment (4 items). The Table 3.6 indicates items and their factor loadings of academic dishonesty scale.

**TABLE 3.6****ITEMS OF ACADEMIC DISHONESTY SCALE (ADS)****AND THEIR FACTOR LOADINGS**

S. No	Items	Factor loadings
<b>Factor: One</b>		
<b>Cheating in Examination (CE)</b>		
Item7	During examination I use signals to fetch answers from my friends.	.439
Item8	I use prohibited things like hidden notes, calculators and other electronic devices during examination.	.759



Item9	I interchange my allotted answer book with other student in examination room.	.753
Item10	During an examination, I solve answers on question paper and handover to my classmates.	.697
Item14	During a test I try to copy from another student.	.472
<b>Factor: Two</b>		<b>Plagiarism (PL)</b>
Item22	I copy summary of a story/poem/chapter from a textbook & claim it as completed by me.	.615
Item26	For submitting assignment, I copy and change few sentences/lines/words and phrases from other sources.	.780
Item27	I use online resources in my personal educational assignment/project without citing the author.	.743
Item25	For personal comments I manipulate scientific information on internet and claim it as written by me.	.463
<b>Factor: Three</b>		<b>Outside Help (OH)</b>
Item17	I attempt to make special considerations to attain or getting favours i.e. (bribery)	.689
Item19	In an individual work/assignment I take help from others to complete it.	.571
Item20	I use unfair means to obtain information about the content of the test before it was given.	.413
Item18	Before examination I try to know questions asked in paper.	.640
<b>Factor: Four</b>		<b>Prior Cheating (PC)</b>
Item28	I write expected answers on table/wall/hand/paper etc. in prior time.	.682
Item29	I interchange my allotted seat near efficient student to get better grade in examination.	.731
Item33	Before examination I encourage other classmates to do cheating.	.564
<b>Factor: Five</b>		<b>Falsification</b>
Item2	I submit the assignment in my name after getting it prepared by my friends.	.605
Item3	I damage library books so that classmates do not get required content.	.689
Item6	In a course I submit the same educational assignment more than one time.	.447
<b>Factor: Six</b>		<b>Lying about Academic Assignments</b>
Item15	I give false explanations when I miss deadline of my educational project.	.534
Item37	I buy a project/assignment/paper online & submit it as my individual effort.	.649
Item32	Before exam I pay someone to write a paper/homework for me.	.477
Item38	I provide false excuses to teacher, to gain extra time on project/assignment.	.624

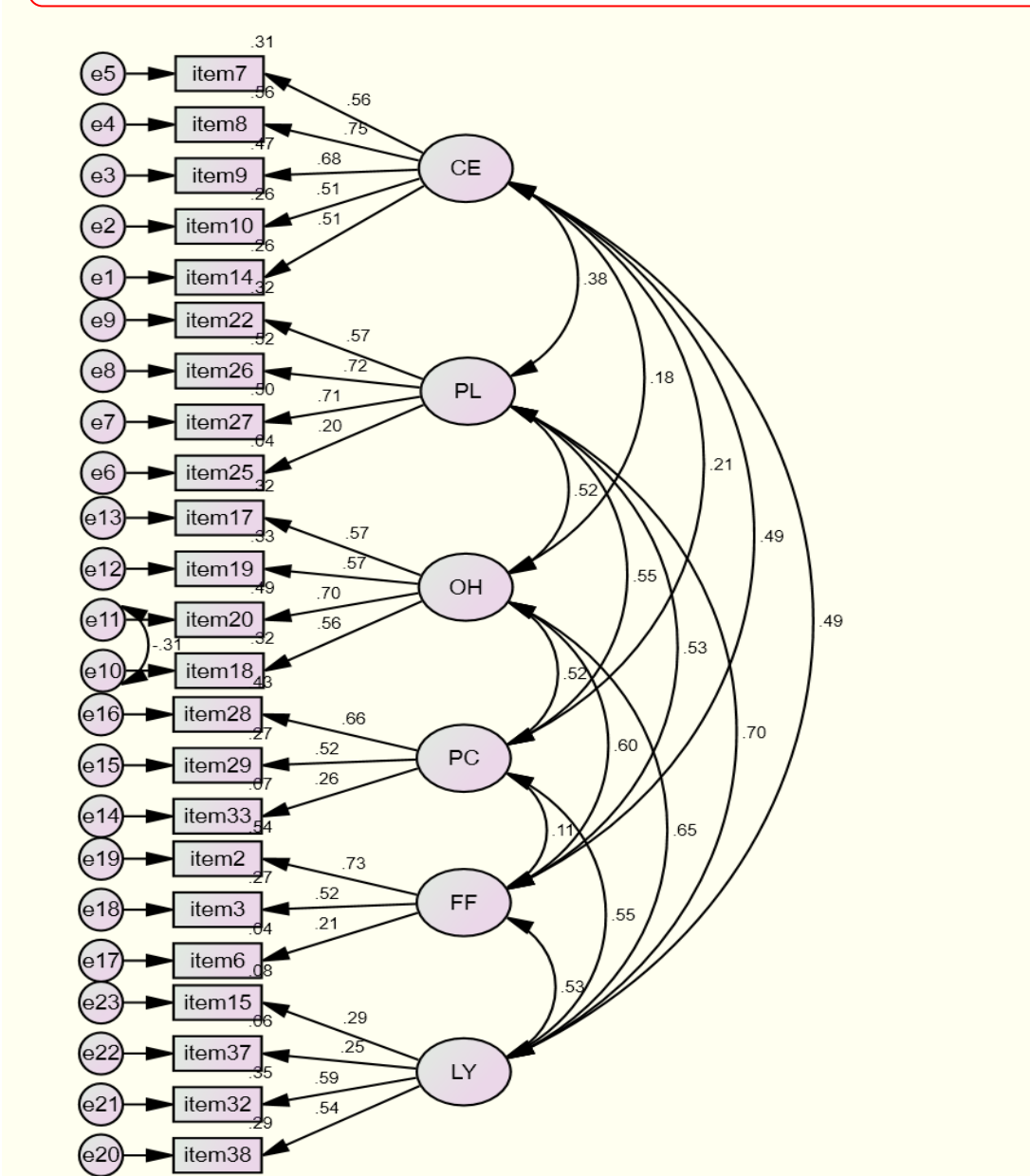
- **CONFIRMATORY FACTOR ANALYSIS**

According to Joreskog and Sorbom (2004) confirmatory factor analysis is a distinct case of Structural Equation Modelling which is also known as linear structural relationship model. Even though exploratory factor analysis gives an idea of dimensionality, confirmatory factor analysis, as the name implies, basically focuses on whether a hypothesized factor model does or does not fit the data set. Thus, confirmatory factor analysis is now a universally accepted technique to confirm dimensionality (Floyd & Widaman, 1995; Netemeyer et al., 2003). The confirmatory factor analysis was applied using IBM-SPSS Amos 22-version to six factors extracted in exploratory factor analysis. The structure of the academic dishonesty scale, which consisted of 23 items and six factors, was tested by using the confirmatory factor analysis. This analysis was made over 450 students, who were selected conveniently. The findings obtained as a result of analyzing the model with confirmatory factor analysis are given below.

Initially, the fit indices of the model were (CMIN/DF = 2.251, Goodness Fit Index (GFI) = .913, Adjusted Goodness of Fit Index (AGFI) = .888, Comparative Fit Index (CFI) = .858, Root Mean Square of Approximation (RMSEA) = .053 and Chi-square = 484.02 ( $p > 0.01$ ). The final indices of the model were (CMIN/DF = 2.173, Goodness Fit Index (GFI) = .915, Adjusted Goodness of Fit Index (AGFI) = .901, Comparative Fit Index (CFI) = .870, Root Mean Square of Approximation (RMSEA) = .051 and Chi-square = 464.93 ( $p > 0.01$ ). The standard values for the indices: The GFI, CFI and AGFI values must be between 0 and 1. Although there is no agreement on these values in the literature, if the values are over 0.90, this is the evidence of a good fit (Schumacker & Lomax, 2016). However, Hair et al. (2010) suggested that CFI value  $>.85$  is acceptable but CFI  $>.90$  is considered better fit (p. 647). In addition, several studies such as Gay, Evenson, and Smith (2010); Mahne and Huxhold (2014); Lima-Rodríguez, Lima-Serrano, and Domínguez-Sánchez (2015), have CFI value which is lower than .90. The RMSEA values also vary between 0 and 1. The more these values are close to 0, the more they indicate a fit. So, RMSEA is a good fit indicator in this model (Hooper, Coughlan, & Mullen, 2008; Hu & Bentler, 1999; Joreskog & Sorbom, 1993; Kline, 2005). Nonetheless, researcher like Schumacker and Lomax (2016) suggested that if majority of the fit indices are over threshold value, then it can be concluded that theoretical model is supported by the data. As a

result, all the standard fit indices show that the factor structure of the model is approved. Figure 3.3 provides a holistic view of the confirmatory factor analysis model.

**Figure 3.3 Confirmatory Factor Analysis Model of Academic Dishonesty**



- **RELIABILITY ANALYSIS**

The reliability was measured by interpreting the obtained value of Cronbach’s Alpha (Cronbach, 1951) to assess the internal consistency of the scale. The Cronbach’s alpha for the final set of statements was found out to be .831 (Table 3.7). This illustrates a high degree of internal consistency among the items. The interpretation made by Gliem and Gilem (2003) asserted that the Alpha reliability coefficient usually ranges from 0 and 1. But, there is no lower limit to Alpha reliability coefficient and closer the value of alpha to 1.0, greater is the internal consistency of the measure. The thumb rule acknowledged by George and Mallery (2003) for the interpretation of Alpha is: “0.80 to 0.9 Good; and above 0.9 Excellent”. For this scale Cronbach’s alpha indicated good internal reliability ( $\alpha = .831$ ). So, reliability analysis suggests that academic dishonesty scale is internally consistent. A copy of scale has been placed in Appendix-A

**TABLE 3.7**

**RELIABILITY STATISTICS OF ACADEMIC DISHONESTY SCALE**

Cronbach’s Alpha	Number of Statements
.831	23

**INTERCORRELATIONS OF THE ACADEMIC DISHONESTY SCALE**

Pearson’s coefficient of correlation revealed significant and positive correlations of all dimensions (Cheating in examination, Plagiarism, Outside help, Prior cheating, Falsification and lying about academic assignments respectively) with total academic dishonesty scale (ADS), which are significant at 0.01 level of significance. As the table indicates, the model with best fit demonstrated inter-correlation between factors and academic dishonesty scale ranges from .528 to .728 which is also shown in table 3.8.

**TABLE 3.8**  
**INTERCORRELATIONS FOR CHEATING IN EXAMINATION,**  
**PLAGIARISM, OUTSIDE HELP, PRIOR CHEATING, FALSIFICATION,**  
**LYING ABOUT ACADEMIC DISHONESTY AND TOTAL ACADEMIC**  
**DISHONESTY**

Constructs →	CE	PL	OH	PC	FF	LY	TAD
<b>CE</b>	1	.316**	.175**	.195**	.338**	.440**	.672**
<b>PL</b>		1	.378**	.304**	.354**	.441**	.711**
<b>OH</b>			1	.350**	.427**	.345**	.672**
<b>PC</b>				1	.125**	.280**	.528**
<b>FF</b>					1	.280**	.613**
<b>Ly</b>						1	.728**

**Note:** CE=Cheating in Examination; PL=Plagiarism; OH=Outside Help; PC= Prior Cheating; FF=Falsification; LY=Lying about Academic Assignments; TAD= Total Academic Dishonesty; \*\*Significant at 0.01 level

- **CONSTRUCT VALIDITY OF ACADEMIC DISHONESTY SCALE**

The construct reliability (CR) of academic dishonesty scale is adequate as per the researcher i.e. .70 (Hair et al., 2010). A satisfactory benchmark is obtained for construct reliability (CR) with the cheating in examination factor of 0.829, plagiarism of 0.779, outside help of 0.797, prior cheating of 0.730, falsification of 0.714 and the lying about academic assignments of 0.781. On the basis of above six criteria, each element has acceptable convergent validity while the average variance extracted (AVE) value <0.5. The discriminant validity was evaluated by applying the pattern method of (Fornell & Larcker, 1981), which states that, “discriminant validity exists when Squared Inter construct correlation (SIC) is less than average variance extracted (AVE)”. For this purpose, square inter constructs correlation (SIC) is less than the AVE which indicates good discriminant validity. Hence, the constructs are truly distinct from others. Therefore, these aspects reflect the construct validity of the scale. On the other hand, the factor loadings, reliability measures also provide strong evidence for the construct validity.

• **SCORING PROCEDURE OF ACADEMIC DISHONESTY SCALE (ADS)**

Therefore, academic dishonesty scale contained 5-point Likert format, each item is rated on five sequential points, (always=4, frequently=3, sometimes=2, rarely=1 and never=0. The details regarding scoring of the scale is given below in table 3.9.

**TABLE 3.9**  
**SCORING PROCEDURE OF ACADEMIC DISHONESTY SCALE (ADS)**

Always	Frequently	Sometimes	Rarely	Never
4	3	2	1	0

**FINAL DRAFT**

The final draft of the academic dishonest scale has 23-items distributed in six dimensions viz: cheating in examination, plagiarism; outside help, prior cheating, falsification, and lying about academic assignments. The serial number-wise (as mentioned in appendix-I) distribution of the items have been presented in table 3.10.

**TABLE 3.10**  
**NUMBER OF ITEMS AND DIFFERENT DIMENSIONS**  
**OF ACADEMIC DISHONESTY SCALE**

Sr. No.	Dimension	No of items	Total
<b>I.</b>	Cheating in Examination	1-5	5
<b>II.</b>	Plagiarism	6-9	4
<b>III</b>	Outside Help	10-13	4
<b>IV</b>	Prior Cheating	14-16	3
<b>V</b>	Falsification	17-19	3
<b>VI</b>	Lying about Academic Assignments	20-23	4
<b>Grand Total</b>			<b>23</b>

## DEVELOPMENT OF NORMS

The respondents of the study were selected from Jammu and Kashmir using random sampling technique ensuring that participants are appropriate in terms of representativeness and adequacy for proposed population. The final scale consists of 23-items related to academic dishonesty (AD), the range of individual respondents score calculated from raw score on present scale is 23 to 92, on the basis of descriptive statistics, z-score norms based on 450 responses have been prepared by applying formula  $(\text{Raw score} - \text{Mean} / \text{SD})$ . Mean score of the entire scale is 53.25 and standard deviation = 14.24. Norms for interpretation of the levels of academic dishonesty scale (ADS) have been presented in table 3.11.

**TABLE 3.11**

### Z-SCORE NORMS OF ACADEMIC DISHONESTY SCALE (ADS)

Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score
23	-2.12	24	-2.05	25	-1.98	26	-1.91	27	-1.84
28	-1.77	29	-1.70	30	-1.63	31	-1.56	32	-1.49
33	-1.42	34	-1.35	35	-1.28	36	-1.21	37	-1.14
38	-1.07	39	-1.00	40	-0.93	41	-0.86	42	-0.79
43	-0.71	44	-0.64	45	-0.579	46	-0.50	47	-0.43
48	-0.36	49	-0.29	50	-0.22	51	-0.15	52	-0.08
53	-0.01	54	+0.05	55	+0.12	56	+0.19	57	+0.26
58	+0.33	59	+0.40	60	+0.47	61	+0.54	62	+0.61
63	+0.68	64	+0.75	65	+0.82	66	+0.89	67	+0.96
68	+1.03	69	+1.10	70	+1.17	71	+1.24	72	+1.31
73	+1.38	74	+1.45	75	+1.52	76	+1.59	77	+1.66
78	+1.73	79	+1.80	80	+1.87	81	+1.94	82	+2.01
83	+2.08	84	+2.15	85	+2.22	86	+2.29	87	+2.37
88	+2.44	89	+2.51	90	+2.58	91	+2.65	92	+2.72

The range of individual respondents score calculated from the raw score on present scale on the basis of descriptive statistics, z-score norms for interpreting the levels of academic dishonesty scale (ADS) and its dimensions. Interpretation of z-score on dishonest academic practices of respondents has been displayed in Table 3.12.

**TABLE 3.12**

**NORMS FOR INTERPRETING THE LEVELS OF ACADEMIC DISHONESTY SCALE (ADS) AND ITS DIMENSIONS**

<b>Constructs</b>	<b>CE</b>	<b>PL</b>	<b>OH</b>	<b>PC</b>	<b>FF</b>	<b>LY</b>	<b>TAD</b>
Levels of ADS	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score
Very High AD	+1.40 & above	+1.90 & above	+1.88 & above	+2.14 & above	+2.19 & above	+2.14 & above	+1.99 & above
High AD	+1.08 to +1.39	+1.09 to +1.89	+1.09 to +1.87	+1.07 to +2.13	+1.08to +2.18	+1.06 to +2.14	+0.97 to +1.98
Average AD	-1.14 to + 1.07	-0.28 to +1.08	-0.74 to +1.08	-0.72 to +1.06	-0.02 to +1.07	-0.79 to +1.07	-0.99 to +0.96
Low AD	-1.38 to -1.15	-1.09 to -0.29	-1.53 to -0.75	-1.80 to -0.73	-0.75 to -0.03	-1.60 to -0.80	-1.97 to -1.00
Very low AD	-1.39 & below	-1.10 & below	-1.54 & below	-1.81 & below	-0.76 & below	-1.61 & below	-1.98 & below

**Note:** CE=Cheating in Examination; PL=Plagiarism; OH=Outside Help; PC=Prior Cheating; FF=Falsification; LY=Lying About Academic Assignments; AD= Academic Dishonesty; TAD= Total Academic Dishonesty



### **3.2.2 DESCRIPTION OF ANOMIE SCALE**

Anomie Scale was developed and standardized by the investigator to measure the personal feelings, beliefs, and attitudes of undergraduate students. The development and validation of the scale was carried out by adopting highly reliable and valid scale development procedures. This scale has 21-items related to three dimensions of anomie. The scale development and validation procedure is given below in a sequence.

- **NEED FOR SCALE DEVELOPMENT**

After reviewing the previous literature of anomie, it was found that several measurements have been developed to investigate anomie. However, as Bjarnason (2009) pointed out, most of the tools lacked sound support of psychometric properties as well as their dimensionality was not meticulously examined. Several reasons would be adequate to support this issue. The anomie scale developed by Srole (1956) is most commonly used to examine anomie among individuals. The scale measured individual's self-to-other alienation and is based on 05 dichotomous (yes/no) items, ranging from measures individual anomie on social integration continuum (Caruna et al., 2000) where "self-to other belongingness" is one end and other "self-to-other alienation" (Teevan, 1975). This instrument has been used in numerous studies as well as several instruments were based on this measurement like Fischer (1973) and Teevan (1975) addressed the drawbacks in Srole's scale. These traditional instruments thus have numerous practical and theoretical deficiencies and are becoming increasingly out of date (Bjarnason, 2009).

Notwithstanding its deficiency, McClosky and Schaar (1965) proposed psychological anomie based on nine dichotomous (agree/disagree) scale to measure an individual's state of mind. It is believed the all statements in the tool measure individual's beliefs, attitudes and feelings. Additionally, Teevan (1975) suggested a modification of the referent in items like "the average man" and "a person" to "I" in order to consistency measure a person's own anomie, rather than the anomie of others or the degree of anomie in society. Moreover, Travis (1993) asserts that previous measurements focus on the normative structures of society and its effect on individuals rather than measuring the attitudinal levels of analysis (i.e., values, beliefs and attitudes) that are important in studying anomie. He proposed the margin of

society (MOS) alienation scale that consists of 14 items on likert format. The scale eliminates the broadness of Srole's scale and attempts to identify attitudinal variables of alienation.

Elmore (1962) proposed comprehensive measure of psychological anomie than the one devised by Srole. According to Elmore, although the Srole's scale is adequate as a quick measure of personal concept of anomie, it is limited because it consists of only five items. As it was not subjected to any recognized scale construction procedure, it fails to include any hypothesized facets of anomie mentioned in the theoretical literature; and it seems subject to acquiescent response set. Similarly, investigator studied the extensive literature on anomie in the Indian context; no such work has been done in this area. So, there is a need to develop and validate the measurement of anomie.

- **METHOD**

A scale development approach was used to develop an instrument that sufficiently measures the feeling or perception of anomie. The procedures were as follows (a) defining and specifying the construct being measured, (b) generating an item pool, (c) providing and considering the study of experts on initial item pool, (d) refining and validating scale, and (e) evaluating the items (DeVellis, 2012; Netemeyer et al., 2003; Wymer & Alves, 2012).

### **SCALE CONSTRUCTION AND PSYCHOMETRIC ANALYSIS**

In this investigation rigorous literature was studied in order to develop a valid and reliable scale. In initial stage, item generation was based on conceptual model and investigator has adapted items from previous scales. The study adapted a measure of anomie developed by Srole, 1956; Elmore, 1962; Teevan, 1965; McClosky & Schaar 1965; Rushing, 1971; Travis, 1993; Tsahuridu, 2011; Bjarnason, 2009; Teymoori et al. (2016). Initially, 49 statements were constructed, 34 items were adapted from prior measures and a further 15 statements were constructed by the investigator. However, since most statements' wordings were adapted to be more appropriate in the perspective of the current study. Therefore, summated evaluation technique suggested by Likert (1932) has been used for developing anomie scale. Therefore, the scoring method of the present 5-point Likert scale is: Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, and strongly disagree = 1, whereas negative statements are coded as

vice versa. The total calculated score would indicate level of perception of anomie among students. So, higher score on anomie measurement interprets that students have higher perception of anomie and vice versa.

- **CONTENT VALIDITY**

After preparing the scale statements, the content validity was performed quantitatively and qualitatively with the contribution of sixteen experts who hold doctorates in the field of education, sociology and psychology. An expert judgement is a general procedure of item construction (DeVellis, 2016; Netemeyer et al., 2003). For qualitative analysis, 49 items were constructed and the complete package of items was submitted to content experts, which included both anomie scale and instructions to assess content and organization of measurement. Similarly, an outline of qualitative assessment criteria as recommended by McKenzie et al. (1999) were analyzed, and proper modifications were made to improve the overall quality of the scale.

After completion of revisions of the qualitative reviews, a quantitative assessment packet was submitted to each expert. An assessment tool consisting of three items was used in order to analyze the expert viewpoints. Specialists were requested to rate the correctness of each statement by stating if each item was “essential”, useful but not essential, not necessary.” Table 3.13 presents an outline of the quantitative assessment of scale items.

**TABLE 3.13**  
**EXAMPLE OF QUANTITATIVE ASSESSMENT**

Item	Rating*		
I think the life of an ordinary man is getting worse day by day.	1	2	3

\*1=essential, 2=useful but not essential, 3=not necessary

By combining all the assessment tools as one assessment tool, the issue of how many experts approved each possible option of the items was determined. In this perspective, the content validity of the statements was determined with the “CVR = (Ne- N/2) / (N/2)” where CVR = Content Validity Ratio, Ne = Number of subject matter experts panelists indicating item essential and N = Total number of Subject Matter Experts (SME) panelists (Lawshe, 1975). Table 3.14 highlights item-wise content ratios and significant items for anomie scale.

**TABLE 3.14****ITEM WISE CONTENT VALIDITY RATIOS (CVR) FOR ANOMIE SCALE**

<b>S. N.</b>	<b>Item</b>	<b>CVR</b>	<b>S. N.</b>	<b>Item</b>	<b>CVR</b>
01	Malpractices in the society.	1.00	02	Determined by higher officials.	1.00
03	They want to follow.	1.00	04	Live by society rules.	1.00
05	Hardships it may cause.	0.75	06	Life is worthless.	0.75
07	Worse day by day.	1.00	08	Rules to follow.	1.00
09	Caring with each other.	1.00	10	Educated youths.	1.00
11	Trust and rely on.	1.00	12	My personal ambitions.	1.00
13	Reward is high enough.	1.00	14	The common man.	1.00
15	Open for me later.	1.00	16	Important thing in life.	0.87
17	Justify the means.	0.87	18	Easy ways and hard ways.	0.75
19	In our country.	0.87	20	Take care of itself.	0.75
21	Pay anything in life.	1.00	22	What to do with my life.	1.00
23	Not a part of system.	1.00	24	My fellow human beings.	1.00
25	Recruitment of jobs.	1.00	26	My destiny.	1.00
27	It is right or wrong.	1.00	28	Approach to get ahead.	1.00
29	Follow in our society.	1.00	30	Possible to plan ahead.	1.00
31	Expected from him/her.	1.00	32	Lack concern about others.	0.87
33	Frustrated with life.	0.87	34	What happens to me.	1.00
35	Prestige and power.	0.75			

**Note:** Items were not statistically significant and were excluded from the final scale.

The minimum values of content validity ratio's (CVR) at  $\alpha = .05$  significance level is used for expert viewpoints as recommended by Lawshe (1975). Content validity calculations based on sixteen expert opinions of the anomie scale were analyzed. Therefore, to provide significance statistically according to expert numbers, for 16 experts 0.49 value was used as the Content Validity Criterion (CVC). However, retained items obtained CVR value at or above 0.75 in this assessment. Moreover, item having CVR values below content validity criterion were excluded from the final scale. Quantitative expert views were analyzed and 13 statements were deleted and further 35 items were retained to perform the exploratory factor analysis.

- **EXPLORATORY FACTOR ANALYSIS**

In order to test the factorial validity of the anomie scale, it was applied to four hundred fifty undergraduate students. The Kaiser-Meyer Olkin (KMO) coefficient was applied to determine whether the sampling size was appropriate for factorization or not, and the Barlett Test of Sphericity was applied to determine whether or not the data were from multivariate normal distribution. For the factorial validity, the factorial organization of the measure was determined by using the Explanatory Factor Analysis (EFA). The Explanatory Factor Analysis is applied to determine the association between the unknown latent variables and the observed variables (Schreiber, Nora, Stage, Barlow, & King, 2006). This analysis is defined as being explanatory or a discoverer for researchers who do not have any ideas on the issue of under which factor the items perform measurements in reality (Byrne, 1994). As a matter of fact, it is expected in factor analysis, which is performed to locate the variable in the factor group in question, that the factor loads are high. When the literature is scanned it is observed that there is a widely-held belief that an item must have at least 0.30 minimum size for the factor load of the relevant item. According to Tabachnick and Fidell (2001), the loading value of each variable must be evaluated at or over 0.32 as a basic rule.

The analysis of the data was conducted using Exploratory Factor Analysis (EFA) aided IBM SPSS statistical software version-22. The EFA procedure uses principal components analysis (PCA) with Varimax method. To determine the number of factors, investigator look at the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity. Numerous iterative series of exploratory factor analysis were performed on the data set. The total variance explained and numbers of elements extracted were examined after each iteration. Components with low communalities and which didn't correlate were deleted with the aim of improving the factor structure so that to get a matrix with much clear loadings. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be .920 (the minimum acceptable coefficient is .60; Tabachnick & Fidell, 1996), and the Bartlett's test of sphericity was significant 4598.445,  $p < .001$ ). Both of these suggest adequacy of the participants for exploratory factor analysis. Since the values obtained as a result of the above mentioned analyses fit the basic hypotheses at a good level, it was decided that the factor analysis could be conducted (Kothari & Garg, 2014).

**TABLE 3.15**  
**KMO AND BARTLETT'S TEST OF SPHERICITY**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
	Approx. Chi-Square	4598.445
Bartlett's Test of Sphericity	Df	276
	Sig.	.000

Subsequently, the factor loadings show the correlation between the items to be measured and the main structure, the relevant dimensions that appeared as a result of the basic component analysis and the factor loads were examined. After these processes, the last form of the anomie was given as 22 items. The rotated components matrix, which was converted with Varimax method, and which was obtained as a result of the factor analysis, is given in Table 3.16. The Varimax method, which is one of the vertical rotating methods, was preferred in order to ensure that the factor variances would have high value with a few variables. Exploratory factor analysis revealed a three facet structure, explaining 56.91 percent of the variance (acceptance variance is 50%; Streiner, 1994), and all items had loading above .40 (Acceptable item loading of sample 350 is 0.40, Heir et al., 2010). Investigator named each factor based on the association between items and the relevant literature. The first component contained of items associated to the meaninglessness (09 items), second factor consisted of items associated to the distrust (08 items) and third component comprised of the items associated to moral decline (05 items). The results of the factor analysis and origin of items of anomie scale are displayed in Table 3.16.

**TABLE 3.16**  
**RESULTS OF THE FACTOR ANALYSIS OF THE ANOMIE SCALE (AS)**

S. No	Items	Factor Loadings
<b>Factor: 1</b>		
	<b>Meaninglessness (ML)</b>	
Item7	I think the life of an ordinary man is getting worse day by day. (Srole, 1956)	.741
Item25	I think there are no clear rules in recruitment of jobs. (Investigator made)	.730
Item2	I think a person's future is determined by higher officials. (Investigator made)	.711
Item26	I have no control over my destiny. (Teevan, 1975)	.709

Item22	I really do not know what to do with my life. (Teevan, 1975)	.668
Item24	I feel lonely and unrelated to my fellow human beings. (Teevan, 1975)	.643
Item31	I believe that inspite of one's capability nobody knows what is expected from him/her. (Bjarnason, 2009)	.598
Item06	I get the feeling that life is worthless. (Teevan, 1975)	.590
Item 08	I often have trouble deciding which rules to follow. (Travis, 1993)	.569

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**Factor: 2**

**Distrust (DT)**

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Item09	I believe people are caring with each other*. (Investigator made)	.801
Item14	I think public officials do not care about the problems of the common man.(Strole, 1956; Teevan, 1975)	.697
Item11	I don't know whom I can trust and rely on. (Tsahuridu, 2011; Teymoori et al., 2016)	.685
Item03	I think people follow whatever rules they want to follow. (Bjarnason, 2009)	.682
Item10	I think higher administration doesn't care about the careers of unemployed educated youths. (Investigator made)	.672
Item04	I like to live by society rules*. (Travis, 1993)	.651
Item21	I think getting higher education is unimportant for future life plan because it does not pay anything in life. (Investigator made)	.564
Item15	If I work hard and study today, I am sure that a job will be open for me later*. (Elmore, 1962)	.447

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**Factor: 3**

**Moral Decline (MD)**

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Item27	I think that if something works, it doesn't really matter whether it is right or wrong. (Rushing, 1971; Teymoori et al., 2016)	.630
Item29	I think that there are no clear moral standards to follow in our society. (Teymoori et al., 2016)	.583
Item28	I think that honesty doesn't work all the time; dishonesty is sometimes a better approach to get ahead. (Rushing, 1971; Teymoori et al., 2016)	.552
Item13	I think a person is justified in doing anything if the reward is high enough. (Rushing, 1971; Teymoori et al., 2016)	.485
Item12	I obey the laws no matter how much it interferes with my personal ambitions*. (Rushing, 1971)	.439

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\*Indicates negative items

- **CONFIRMATORY FACTOR ANALYSIS**

Confirmatory Factor Analysis, according to Joreskog and Sorbom (2004) is a distinct case of Structural Equation Modelling which is also known as linear structural relationship model. Even though Exploratory Factor Analysis gives an idea of dimensionality, CFA, as the name implies, basically focuses on whether a hypothesized factor model does or does not fit the data set. Thus, CFA is now a universally accepted technique to confirm dimensionality (Floyd & Widaman, 1995; Netemeyer et al., 2003). The CFA was applied using IBM-SPSS Amos 19-version to three factors extracted in EFA. The structure of the anomie scale, which consisted of 22 items and three factors, was tested by using the confirmatory factor analysis. This analysis was made over 450 students, who were selected conveniently. The GFI, CFI and AGFI values must be between 0 and 1. Although there is no agreement on these values in the literature, if the values are at or over 0.90, this is the evidence of a good fit (Schumacker & Lomax, 2016).

Consequently, a sequence of improved run of confirmatory factor analysis was carried on, the outcomes of statistics for fit indices shown perfection in every stages, and last result came to average fit as-  $\chi^2 = 489.449$ ,  $DF = 172$ ,  $p = 000$ ,  $RMSEA = 0.064$ ,  $CMIN/DF = 2.846$ ,  $GFI = .902$ ,  $AGFI = .869$ ,  $CFI = .914$  as also shown in table 3.17. The RMSEA values also vary between 0 and 1. The more these values are close to 0, the more they indicate a fit. So, RMSEA is a good fit indicator in this model (Hooper et al., 2008; Hu & Bentler, 1999; Jpreskog & Sorbom, 1993; Kline, 2005). Nonetheless, researcher like Schumacker and Lomax (2016) suggested that if majority of the fit indices are over threshold value, then it can be concluded that theoretical model is supported by the data. As a result, all the standard fit indices show that the factor structure of the model is approved. In this analysis item 6 was deleted to improve the model fit and details regarding each series of run are given in Table 3.18. The final anomie scale consists of 21 items encompassing 3-dimensions scale. Figure 3.4 provides a holistic view of the confirmatory factor analysis model.

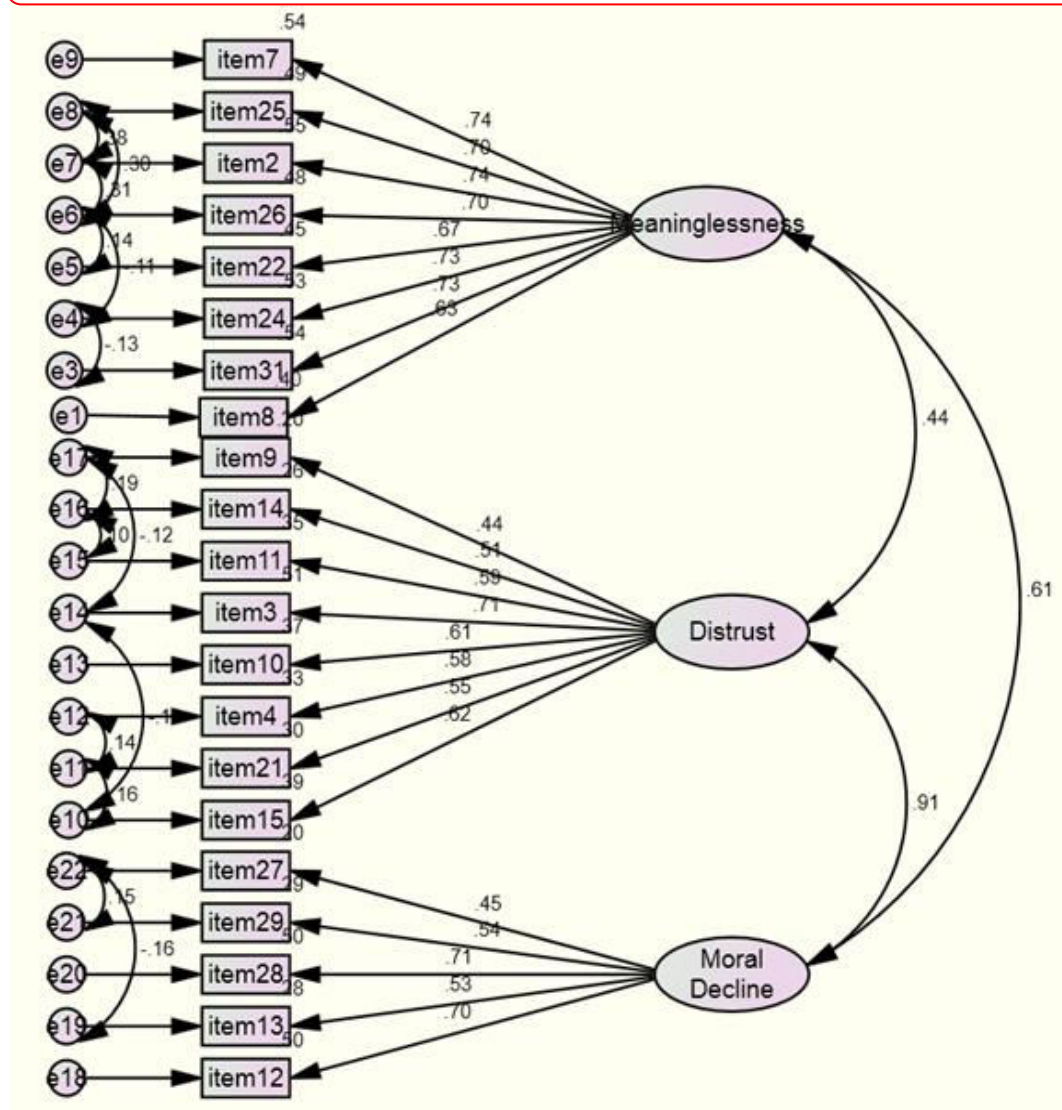


TABLE 3.17

MEASUREMENT MODEL GOODNESS OF FIT OF ANOMIE

Fit Indices	Statistics for Block 1	Statistics for Block 2	Statistics for Block 3	Statistic for Block 4	Statistics for Block 5
$\chi^2$	681.123	579.742	553.333	530.192	489.449
Df	206	182	180	176	172
RMSEA	.072	.070	.068	.067	0.064
CMIN/DF	3.306	3.185	3.074	3.012	2.846
GFI	.865	.880	.885	.891	.902
AGFI	.834	.848	.852	.856	.869
CFI	.879	.892	.900	.904	.914
<i>p</i> -value	0.000	0.000	0.000	0.000	0.000

Figure 3.4 Confirmatory Factor Analysis Model of Anomie Scale



- **RELIABILITY ANALYSIS**

The reliability was measured by interpreting the obtained value of Cronbach’s Alpha (Cronbach, 1951) to assess the internal consistency of the scale. The alpha coefficient is regularly used to measure the internal consistency. In practice, it is essential to verify whether the alpha ( $\alpha$ ) coefficient is high (Hayashi & Kamata, 2005). So, The Cronbach’s alpha for the final set of items was found out to be  $\alpha = .894$ , which is also displayed in table 3.18. This illustrates a high degree of internal consistency as interpretation made by Gliem and Gilem (2003). Moreover, the thumb rule acknowledged by George and Mallery (2003); DeVellis (2016) for the interpretation of Alpha indicated that above 0.7 is acceptable. So, reliability analysis suggests that anomie scale is internally consistency. A copy of scale has been placed in Appendix-B.

**TABLE 3.18**  
**RELIABILITY STATISTICS OF ANOMIE SCALE**

<b>Cronbach’s Alpha</b>	<b>Constructs</b>	<b>N of items</b>
.894	Meaninglessness	08
.806	Distrust	08
.715	Moral Decline	05
.894	Anomie Scale	21

- **CONSTRUCT VALIDITY OF ANOMIE SCALE**

The construct reliability (CR) of anomie scale is adequate as per the researcher i.e. .70 (Hair et al., 2010). A satisfactory benchmark is obtained for construct reliability (CR) with the meaninglessness factor of 0.889, distrust of 0.888 and moral decline of 0.829. Based on the construct reliability (CR) values, each component has adequate convergent validity as the average variance extracted (AVE) values are near about .50 (Acceptable threshold limit of AVE is .50 or greater; Hair et al., 2010). In the present study, the discriminant validity was evaluated by using the pattern method of (Fornell & Larcker, 1981), which states that, “discriminant validity exists when Squared Inter construct correlation (SIC) is less than average variance extracted (AVE).” For this purpose, square inter constructs correlation (SIC) is less than the AVE which indicates good discriminant validity. Hence, the constructs are truly distinct from

others. Therefore, these aspects reflect the construct validity of the scale. On the other hand, the factor loadings and reliability measures also provide strong evidence for the construct validity.

- **SCORING PROCEDURE**

Therefore, the anomie scale contained items on 5-point Likert format, each item is rated on five sequential points, (strongly agree; agree; neutral; disagree; strongly disagree. The serial number-wise (as mentioned in appendix-II) distribution of the items and procedure of scoring have been presented in Table 3.19.

**TABLE 3.19**  
**SCORING PROCEDURE OF ANOMIE SCALE (AS)**

Types of Items	No. of Items	Item Number	SCORES				
			SA	A	N	DA	SD
Positive	17	1, 2, 3, 4, 7, 8, 9, 10, 12, 14, 15,16, 17, 18, 19, 20, 21	5	4	3	2	1
Negative	04	05, 06, 11, 13	1	2	3	4	5

**Note:** SA=strongly agree, A=agree, N=neutral, DA=disagree, SD=strongly disagree

**FINAL DRAFT**

The final draft of the anomie scale has 21-items distributed in three dimensions viz: meaninglessness, distrust and moral decline. The serial number-wise (as mentioned in appendix-II) distribution of the items have been presented in table 3.20.

**TABLE 3.20**  
**NUMBER OF ITEMS AND DIFFERENT DIMENSIONS OF ANOMIE SCALE**

Sr. No.	Dimension	No of items	Total	Range of Score
<b>I.</b>	Moral decline	1-5	5	5-25
<b>II.</b>	Distrust	6-13	8	8-40
<b>III</b>	Meaninglessness	14-21	8	8-40
<b>Grand Total</b>			<b>21</b>	<b>21-105</b>

- **DEVELOPMENT OF NORMS**

The respondents of the study were selected from Jammu and Kashmir using random sampling technique ensuring that participants are appropriate in terms of representativeness and adequacy for proposed population. The final scale consists of

21-items related to anomie scale (AS). The range of individual respondents score calculated from raw score on present scale is 21 to 110, on the basis of descriptive statistics, z-score norms based on 450 responses have been prepared. The mean score of total anomie scale is 66.40 and standard deviation is 8.06. Norms for interpretation of the levels of anomie scale (AS) have been presented in table 3.21 and 3.22.

**TABLE 3.21**  
**Z-SCORE NORMS OF ANOMIE SCALE (AS)**

Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score	Raw Score	Z-Score
43	-2.90	44	-2.78	45	-2.66	46	-2.53	47	-2.41
48	-2.28	49	-2.16	50	-2.03	51	-1.91	52	-1.78
53	-1.66	54	-1.54	55	-1.66	56	-1.54	57	-1.41
58	-1.04	59	-0.92	60	0.79	61	-0.67	62	-0.55
63	-0.42	64	-0.29	65	-0.17	66	-0.049	67	+0.07
68	+0.19	69	+0.32	70	+0.44	71	+0.57	72	+0.69
73	+0.81	74	+0.94	75	+1.06	76	+1.19	77	+1.31
78	+1.44	79	+1.56	80	+1.68	81	+1.81	82	+1.93
83	+2.06	84	+2.18	85	+2.30	86	+2.43	87	+2.55
88	+2.68	89	+2.80	90	+2.93	91	+3.05	92	+3.18
93	+3.30	94	+3.42	95	+3.55	96	+3.67	97	+3.79
98	+3.92								

**TABLE 3.22**  
**NORMS FOR INTERPRETING THE LEVELS OF ANOMIE SCALE AND ITS DIMENSIONS**

Constructs	Meaninglessness	Distrust	Moral Decline	Total Anomie
Levels of Anomie	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score
Very High Anomie	+1.90 & above	+2.06 & above	+1.93 & above	+2.06 & above
High Anomie	+0.95 to +1.89	+0.94 to +2.05	+0.86 to +1.92	+0.95 to +2.05
Average Anomie	-0.95 to +0.94	-1.05 to +0.93	-0.90 to +0.85	-1.03 to +0.94
Low Anomie	-1.92 to -0.96	-3.05 to -1.06	-1.97 to -0.91	-2.02 to -1.04
Very low Anomie	-1.91 & below	-3.06 & below	-1.98 & below	-2.03 & below

### **3.3.3 DESCRIPTION OF CONTEXTUAL INFLUENCES SCALE (CIS)**

Contextual influences scale was developed and standardized by the investigator to measure the peers, parents and institutional influence on attitude, thought and action of an individual. The development and validation of the scale was carried out by adopting highly reliable and valid scale development procedures. The scale development and validation procedure is given below in a sequence.

- **NEED FOR DEVELOPMENT OF THE SCALE**

The contextual environment plays a key role in determining psychological development and behavior (Wise & King, 2008). In its widest sense, the context or milieu includes everything and occurs to the student throughout the course of an academic year that might conceivably affect the results under consideration encompassing institutional and social climate in which the program functions. Researchers have reported that social environment influences a person's attitudes, beliefs and judgments (Steinberg & Darling, 1994). In contextual environment, parents and peer jointly affect an individual throughout his life. Interestingly, Social Cognitive Career Theory (SCCT) postulated a novel effort to comprehend the processes through which people make choices, make interest and accomplish various levels of achievement in occupation and educational pursuits. The theory asserted that cognitive variables that allow individuals to affect their own career development as well as contextual constructs that increase or restrict individual's action or behavior (Lent, Brown, & Hackett, 1994). Moreover, Lee & Shute (2010) revealed that social-contextual factors (social-familial influences and institutional climate directly influence on academic achievement. Similarly, Bandura's Social Learning Theory (1971) stated that behavior patterns could be learned through a person's experience or by watching how others in their environment behave. There is considerable research showing that people are influenced by the behavior of others. Social constructivists believe that one's environment plays a vital role in the development of connotation where reality is constructed based on a person's experiences and interaction within that environment (Flick, 2006; deMarrais & Lapan, 2004). Based on concrete evidence that students' social-contextual environment affects in the domains of attitude, behavior and cognition in concert to generate optimal performance. To the best of the knowledge of investigator there was no such methodologically valid instrument which could measure these three important facets simultaneously. Keeping

in mind the objectives of the present study contextual influences scale was developed and validated in order to know the degree of contextual effect on students' actions, behavior and cognition.

- **METHOD**

A scale development procedure was used to develop an instrument that sufficiently measures the contextual influences of undergraduate/college students. The procedures were as follows (i) definition of the construct intended to measure (ii) generation of scale items (iii) use expert views on initial item pool (iv) refinement of the scale, and (v) evaluation of the scale.

- **ITEM GENERATION PROCEDURE**

In order to develop a reliable and valid scale, an extensive review of literature has been done. In initial stage, investigator generated 80 items related to contextual influences of students. Therefore, summated evaluation technique proposed by Likert (1932) has been used for developing present scale. Therefore the contextual influences scale comprised 5-point Likert scale, each item is graded on five sequential points i.e., (Always=5, frequently=4, Sometimes=3, Rarely=2 and Never=1).

- **VALIDITY ASSESSMENT**

Apart from rigorous investigation of literature pertaining to the meaning of contextual variables, discussions were made with field experts, university teachers and research scholars with regard to main aspects of contextual influences. After preparing the item pool, the face and content validity was qualitatively performed with the participation of sixteen specialists who hold doctorates in the field of psychology and education with a request to suggest any vagueness, ambiguity, or double meaning coming from any item. An expert judgement is a general procedure of item construction (DeVellis, 2016). In order to analyze the expert viewpoints, an evaluation tool consisting of three items was used. In this assessment tool, the experts were asked to choose one of the options "essential", "useful but not essential", "not necessary". By combining all the evaluation tools as one evaluation tool, the issue of how many experts approved each possible option of the items was determined. In this perspective, the content validity of the statements was determined with the "CVR =  $(N_e - N/2) / (N/2)$ " where CVR = Content Validity Ratio,  $N_e$  = Number of subject matter experts panelists indicating item essential and N = Total number of Subject

Matter Experts (SME) panelists (Lawshe, 1975). Consequently, similar procedures as used for development of academic dishonesty and anomie scale were used to evaluate qualitative and quantitative expert viewpoints of contextual influences scale. After this calculation, the items having content validity ratios (CVR) below 0.49 were excluded from the scale. Due to this 10 statements were deleted and further 70 items were retained to perform the item analysis.

- **ITEM ANALYSIS**

The purpose of item analysis is to choose those statements that are most correlated to the construct. The aim is aided by assessing how each statement relates to its own construct, as well as how it relates to other or related construct (Gorsuch, 1997). It was decided to perform item analysis for 300 undergraduate/college students. To begin with tryout, form of the contextual influences scale (CIS) was administered on undergraduate students. The assessment tool of all the students were arranged in ascending order of total score and then 27% of them were selected for both ends (Kelley, 1939). Thus, 81 participants constituted the each group i.e. high group, lower group. Although, t-test was calculated to find out whether high and lower group differs from each statement of contextual influences scale (CIS). After observing t-ratios, only those statements were retained which have t-value equal or greater than threshold value 2.61, which is significant at 0.01 level with DF = 160 (Garrett & Woodworth, 2007). So, one item was deleted in this analysis and pre-final form of contextual influences scale (CIS) consists of 69 statements. The results of the item analysis have been displayed in table 3.23.

**TABLE 3.23**  
**MEAN, STANDARD DEVIATION AND t-VALUE FOR VARIOUS ITEMS OF THE CONTEXTUAL INFLUENCES SCALE (CIS)**

Item	G	N	M	SD	t-value	Item	G	N	M	SD	t-value
1	H	81	4.54	1.01	10.52**	2	H	81	4.57	.999	9.75**
	L	81	2.54	1.37			L	81	2.88	1.19	
3	H	81	2.88	1.63	<b>1.69</b>	4	H	81	3.01	1.87	5.06**
	L	81	2.49	1.21			L	81	1.75	1.22	
5	H	81	4.23	1.20	5.445**	6	H	81	4.49	.808	9.32**
	L	81	3.04	1.56			L	81	2.80	1.41	
7	H	81	4.47	1.00	9.64**	8	H	81	4.42	1.01	9.68**
	L	81	2.67	1.35			L	81	2.73	1.20	
9	H	81	2.94	1.74	4.42**	10	H	81	3.23	1.55	3.99**

	L	81	1.89	1.23			L	81	2.30	1.42	
11	H	81	3.00	1.82	3.99**	12	H	81	2.65	1.68	3.29**
	L	81	2.00	1.32			L	81	1.90	1.17	
13	H	81	3.15	1.55	4.37**	14	H	81	3.28	1.61	5.81**
	L	81	2.15	1.34			L	81	2.02	1.09	
15	H	81	3.94	1.35	6.57**	16	H	81	4.09	1.31	7.72**
	L	81	2.58	1.27			L	81	2.54	1.22	
17	H	81	3.46	1.70	5.73**	18	H	81	3.83	1.50	8.84**
	L	81	2.14	1.18			L	81	1.99	1.11	
19	H	81	2.86	1.81	5.66**	20	H	81	4.16	1.33	10.0**
	L	81	1.56	1.01			L	81	2.14	1.22	
21	H	81	3.38	1.77	4.66**	22	H	81	4.09	1.17	7.33**
	L	81	2.27	1.19			L	81	2.74	1.16	
23	H	81	3.93	1.16	6.39**	24	H	81	4.88	.399	12.05**
	L	81	2.67	1.34			L	81	2.90	1.420	
25	H	81	4.90	.339	12.91**	26	H	81	4.93	.264	14.49**
	L	81	2.91	1.34			L	81	2.86	1.253	
27	H	81	4.49	1.03	7.87**	28	H	81	4.31	1.281	6.76**
	L	81	2.99	1.37			L	81	2.89	1.387	
29	H	81	4.72	.656	10.80**	30	H	81	4.57	.757	10.9**
	L	81	2.93	1.34			L	81	2.68	1.359	
31	H	81	4.64	.856	9.86**	32	H	81	4.73	.725	10.3**
	L	81	2.94	1.29			L	81	2.99	1.33	
33	H	81	3.85	1.24	6.01**	34	H	81	4.75	.662	13.27**
	L	81	2.73	1.12			L	81	2.69	1.23	
35	H	81	4.68	.878	11.01**	36	H	81	4.78	.570	12.16**
	L	81	2.69	1.36			L	81	2.80	1.34	
37	H	81	4.48	1.03	10.81**	38	H	81	4.77	.746	12.92**
	L	81	2.47	1.31			L	81	2.77	1.17	
39	H	81	3.52	1.62	3.45**	40	H	81	3.35	1.70	4.28**
	L	81	2.74	1.21			L	81	2.33	1.27	
41	H	81	4.49	1.07	8.85**	42	H	81	4.37	1.03	9.08**
	L	81	2.74	1.42			L	81	2.74	1.24	
43	H	81	4.31	1.05	7.74**	44	H	81	4.46	.988	8.80**
	L	81	2.85	1.32			L	81	2.88	1.27	
45	H	81	3.63	1.79	2.67**	46	H	81	3.38	1.56	3.63**
	L	81	2.95	1.40			L	81	2.56	1.32	
47	H	81	3.52	1.74	3.63**	48	H	81	3.62	1.758	3.05**
	L	81	2.63	1.34			L	81	2.85	1.415	
49	H	81	3.78	1.46	4.15**	50	H	81	3.68	1.564	4.70**
	L	81	2.88	1.28			L	81	2.65	1.185	
51	H	81	4.16	1.22	6.99**	52	H	81	4.33	1.15	9.20**
	L	81	2.77	1.30			L	81	2.64	1.18	
53	H	81	3.57	1.62	4.58**	54	H	81	4.01	1.32	8.89**
	L	81	2.53	1.23			L	81	2.35	1.03	



55	H	81	3.52	1.81	3.34**	56	H	81	4.33	1.17	8.73**
	L	81	2.69	1.29			L	81	2.74	1.14	
57	H	81	3.67	1.61	3.49**	58	H	81	4.30	1.00	7.45**
	L	81	2.85	1.34			L	81	2.99	1.22	
59	H	81	4.36	1.02	8.90**	60	H	81	4.90	.339	13.11**
	L	81	2.77	1.23			L	81	3.10	1.19	
61	H	81	4.32	1.05	8.07**	62	H	81	3.95	1.52	6.58**
	L	81	2.86	1.23			L	81	2.54	1.17	
63	H	81	4.49	.910	9.67**	64	H	81	4.46	.822	9.84**
	L	81	2.88	1.19			L	81	2.88	1.18	
65	H	81	4.85	.550	11.14**	66	H	81	4.73	.689	11.20**
	L	81	3.02	1.36			L	81	2.96	1.23	
67	H	81	4.37	1.11	8.14**	68	H	81	4.67	.725	12.29**
	L	81	2.91	1.164			L	81	2.75	1.19	
69	H	81	4.31	.875	9.05**	70	H	81	4.72	.637	11.51**
	L	81	2.89	1.107			L	81	2.91	1.25	

**Note:** G=Group, N=Number of individuals, M=Mean, SD= Standard deviation, L=Low, H= High, Bold faced statement indicates rejected item, \*\* Significant at 0.01 level

- **Item-total Correlation**

According to Crocker and Algina (1986) as cited in Raykov and Mels (2009), researchers of different fields (Educational, behavioral, social) are continuously involved in constructing, developing and validating varied components measuring different instruments like tests, inventories, scales, self-reports, testlets, subscales, or questionnaires. During this complex process, they usually get involved in evaluating interrelationship indexes between different factors of a construct, (commonly referred as statements) as well as among statements and composite score. A great deal of statistics in refinement of constructs is reflection of significant relationship between test items and composite score of the construct. Specifically, the item-total correlation representing magnitude to which a statement is related to sum of remaining factors of the construct furnishes information highlighting degree of contribution that item invests towards composite scores of construct. Therefore, after performing item analysis, remaining 69 items under three dimensions were further assessed by computing item-total correlations. So, Pearson's coefficient of correlation was calculated by finding out the correlation between scores on each statement and scores on the contextual influences scale (CIS). The obtained values displayed in table 3.24 indicate good homogeneity among the statements constructed to constitute the scale.

The item-total correlation ranges from .225 to .604 which is significant at 0.01 level of significance.

**TABLE 3.24**  
**ITEM-TOTAL CORRELATION OF THE CONTEXTUAL INFLUENCES SCALE**

Item No.	Item-total correlation	Item No.	Item-total Correlation	Item No.	Item-total Correlation	Item No.	Item-total correlation
01	.447**	18	.428**	35	.625**	52	.448**
02	.356**	19	.484**	36	.505**	53	.521**
03	.388**	20	.366**	37	.485**	54	.382**
04	.283**	21	.401**	38	.439**	55	.495**
05	.482**	22	.369**	39	.321**	56	.372**
06	.403**	23	.556**	40	.479**	57	.457**
07	.447**	24	.562**	41	.536**	58	.514**
08	.353**	25	.460**	42	.426**	59	.553**
09	.415**	26	.288**	43	.465**	60	.463**
10	.262**	27	.368**	44	.322**	61	.343**
11	.366**	28	.465**	45	.392**	62	.325**
12	.393**	29	.560**	46	.394**	63	.451**
13	.423**	30	.500**	47	.388**	64	.545**
14	.428**	31	.460**	48	.430**	65	.567**
15	.470**	32	.417**	49	.420**	66	.471**
16	.435**	33	.547**	50	.467**	67	.531**
17	.519**	34	.519**	51	.520**	68	.507**
69	.481**						

\*\* Significant at 0.01 level

### FINAL DRAFT

The final draft of the contextual influence scale has 69 items distributed in three dimensions viz: peer influence, parental influence, and institutional climate. The serial number-wise distribution of the items has been presented in table 3.25.

**TABLE 3.25**  
**SERIAL NUMBER-WISE DISTRIBUTION OF THE ITEMS**

Sr. No.	Dimension	No of items	Total	Range of Score
<b>I.</b>	Peer influence	1-22	22	22-110
<b>II.</b>	Parental influence	23-46	24	24-120
<b>III</b>	Institutional climate	47-69	23	23-115
<b>Grand Total</b>			<b>69</b>	<b>69-345</b>

## SCORING SYSTEM

The scale is five-point alternative answer likert type scale and all the items are positive worded. Table 3.26 displays scoring procedure of contextual influences scale.

**TABLE 3.26**

### SCORING PROCEDURE OF CONTEXTUAL INFLUENCES SCALE

Dimension	Always	Frequently	Sometimes	Rarely	Never
Score	5	4	3	2	1

#### • RELIABILITY STATISTICS

The alpha coefficient is regularly used to measure the internal consistency. In practice, it is essential to verify whether the alpha ( $\alpha$ ) coefficient is high (Hayashi & Kamata, 2005). So, the reliability was measured by interpreting the obtained value of Cronbach's Alpha (Cronbach, 1951) to assess the internal consistency of the scale. The Table 3.28 indicates reliability coefficient of all dimensions and total contextual influences scale (CIS). The interpretation made by (Gliem & Gilem, 2003), reliability coefficient Alpha normally ranges from 0 and 1. But, there is no lower limit to alpha coefficient and closer the value of alpha to 1.0, greater is the internal consistency of the measure. The thumb rule acknowledged by (George & Mallery, 2003) for the interpretation of Alpha is: "0.80 to 0.9 Good; and above 0.9 Excellent". For this measure Cronbach's alpha indicated excellent internal consistency for peer influence ( $\alpha = .92$ ), for parental influence ( $\alpha = .89$ ), for institutional climate ( $\alpha = .90$ ), and for the contextual influences scale, ( $\alpha = .94$ ). So, reliability analysis (table 3.27) suggests that contextual influences scale is internally consistent. A copy of scale has been placed in Appendix-IV.

**TABLE 3.27**

### RELIABILITY STATISTICS OF THE CONTEXTUAL INFLUENCES SCALE

Dimensions	Peer Influence	Parental Influence	Institutional Climate	Contextual Influences Scale
Number of items	22	24	23	69
Cronbach's Alpha	.92	.89	.90	.94

- **CONVERGENT VALIDITY**

The convergent validity of contextual influences scale (CIS) demonstrated inter-correlation among different dimensions of the scale. When interrelationship of dimensions and overall score can be calculated is convergent validity as recommended by Overbeek, Scholte, de Kemp, & Engels (2007). The results revealed higher levels of positive and significant associations among three dimensions of contextual influences viz: peer influence, parental influence and institutional climate with total contextual influences scale (CIS). The convergent validity ranges from .664 to .866 which is found statistically significant at 0.01 level of significance. The obtained estimations indicate good construct validity of the measure. So, the present scale has adequate inter-dimension homogeneity. The values of convergent validity are presented in Table 3.28.

**TABLE 3.28**

**CONVERGENT VALIDITY OF THE CONTEXTUAL INFLUENCES SCALE**

Scale	Peer Influence	Parental Influence	Institutional Climate	Total Contextual Influences Scale
Peer Influence	-	.299**	.187**	.664**
Parental Influence	-	-	.765**	.866**
Institutional Climate	-	-	-	.814**

\*\* Significant at 0.01 level

- **DEVELOPMENT OF NORMS**

The respondents of the study were selected from Jammu and Kashmir using random sampling technique ensuring that participants are appropriate in terms of representativeness and adequacy for proposed population. The final scale consists of 69 items related to contextual influences (CIS), among them first 22 items associated to peer influence, second 24 items associated to parental influence and last 23 items associated to institutional climate. The range of individual respondents score calculated from raw score on present scale is 69 to 345, on the basis of descriptive statistics, z-score norms based on 450 responses have been prepared. The mean score of contextual influences scale is 242.51 and standard deviation is 43.94. Norms for interpretation of the levels of contextual influences scale (CIS) have been presented in Table 3.29 and Table 3.30.

**TABLE 3.29**

**Z-SCORE NORMS OF CONTEXTUAL INFLUENCES SCALE (CIS)**

<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>
122	-2.74	123	-2.72	124	-2.70	125	-2.67	126	-2.65
127	-2.63	128	-2.61	129	-2.58	130	-2.56	131	-2.54
132	-2.53	133	-2.49	134	-2.47	135	-2.45	136	-2.42
137	-2.40	138	-2.38	139	-2.36	140	-2.33	141	-2.31
142	-2.29	143	-2.26	144	-2.24	145	-2.22	146	-2.20
147	-2.17	148	-2.15	149	-2.13	150	-2.11	151	-2.08
152	-2.06	153	-2.04	154	-2.01	155	-1.99	156	-1.97
157	-1.95	158	-1.92	159	-1.90	160	-1.88	161	-1.86
162	-1.83	163	-1.82	164	-1.79	165	-1.76	166	-1.74
167	-1.72	168	-1.70	169	-1.67	170	-1.65	171	-1.63
172	-1.60	173	-1.58	174	-1.56	175	-1.54	176	-1.51
177	-1.49	178	-1.47	179	-1.45	180	-1.42	181	-1.40
182	-1.38	183	-1.36	184	-1.33	185	-1.31	186	-1.29
187	-1.26	188	-1.24	189	-1.22	190	-1.20	191	-1.17
192	-1.15	193	-1.13	194	-1.10	195	-1.08	196	-1.06
197	-1.04	198	-1.01	199	-0.99	200	-0.97	201	-0.94
202	-0.92	203	-0.90	204	-0.88	205	-0.85	206	-0.83
207	-0.81	208	-0.79	209	-0.76	210	-0.74	211	-0.72
212	-0.69	213	-0.67	214	-0.65	215	-0.63	216	-0.60
217	-0.58	218	-0.56	219	-0.54	220	-0.51	221	-0.49
222	-0.47	223	-0.44	224	-0.42	225	-0.40	226	-0.38
227	-0.35	228	-0.33	229	-0.31	230	-0.28	231	-0.26
232	-0.24	233	-0.22	234	-0.19	235	-0.17	236	-0.15
237	-0.13	238	-0.10	239	-0.08	240	-0.06	241	-0.03
242	-0.01	243	+0.01	244	+0.03	245	+0.06	246	+0.08
247	+0.10	248	+0.12	249	+0.15	250	+0.17	251	+0.19
252	+0.22	253	+0.24	254	+0.26	255	+0.28	256	+0.31
257	+0.33	258	+0.35	259	+0.38	260	+0.40	261	+0.42
262	+0.44	263	+0.47	264	+0.49	265	+0.51	266	+0.53
267	+0.55	268	+0.58	269	+0.60	270	+0.62	271	+0.65
272	+0.67	273	+0.69	274	+0.72	275	+0.74	276	+0.76
277	+0.78	278	+0.81	279	+0.83	280	+0.85	281	+0.88
282	+0.90	283	+0.92	284	+0.94	285	+0.97	286	+0.99
287	+1.01	288	+1.04	289	+1.06	290	+1.08	291	+1.10
292	+1.13	293	+1.15	294	+1.17	295	+1.19	296	+1.22
297	+1.24	298	+1.26	299	+1.29	300	+1.31	301	+1.33
302	+1.35	303	+1.38	304	+1.40	305	+1.42	306	+1.44
307	+1.47	308	+1.49	309	+1.51	310	+1.54	311	+1.56
312	+1.58	313	+1.60	314	+1.63	315	+1.65	316	+1.67
317	+1.70	318	+1.72	319	+1.74	320	+1.76	321	+1.79
322	+1.81	323	+1.83	324	+1.85	325	+1.88	326	+1.90
327	+1.92	328	+1.95	329	+1.97	330	+1.99	331	+2.01
332	+2.04	333	+2.06	334	+2.08	335	+2.10	336	+2.13
337	+2.15	338	+2.17	339	+2.20	340	+2.22	341	+2.24
342	+2.26	343	+2.29	344	+2.31	345	+2.33		

**TABLE 3.30**

**NORMS FOR INTERPRETING THE LEVELS OF CONTEXTUAL INFLUENCES SCALE (CIS)**

Level of Influence	RAW SCORE RANGE				Z-Score Range
	Peer Influence	Parental influence	Institutional climate	Full Scale	
Extremely High Influence	104 & above	117 & above	112 & above	331 & above	+ 2.01 & Above
<b>High Influence</b>	<b>94-103</b>	<b>105-116</b>	<b>100-111</b>	<b>298 to 330</b>	<b>+ 1.26 to + 2.00</b>
Above Average Influence	84-93	93-104	89-99	265 to 297	+0.51 to + 1.25
<b>Average Influence</b>	<b>70-83</b>	<b>77-92</b>	<b>75-88</b>	<b>221 to 264</b>	<b>-0.50 to +0.50</b>
Below Average Influence	60-69	65-76	64-74	188 to 220	-1.25 to -0.51
<b>Low Influence</b>	<b>50-59</b>	<b>53-64</b>	<b>52-63</b>	<b>155 to 187</b>	<b>-2.00 to -1.26</b>
Extremely Low Influence	49 & below	52 & below	51 & below	154 & below	-2.01 & below

### 2.3.4 DESCRIPTION OF PERSONALITY HARDINESS SCALE

The personality hardiness scale is developed and validated by Nowack (1990) in order to measure hardiness tendencies of an individual. The scale was designed to know the three dimensions of personality hardiness scale viz. commitment, control and challenge. In this study, personality hardiness has been adapted from original scale of Nowack (1990). This scale is widely used in all over the world as well as in India. In India, Bansal (2014); Kaur (2007; 2011); Kaur & Singh (2015) used this instrument as well as established its validity and reliability. Similarly, in this study reliability was measured as well as norms were developed to get better information of usability and consistency of personality hardiness scale (PHS) in an undergraduate student population.

The personality hardiness scale is based on five-point rating i.e. strongly agree, agree, neither agree nor disagree, disagree, strongly disagree. This scale has 30 statements measuring overall personality hardiness of an individual. So, it is based on three dimensions pertaining 10 items each for control, commitment, challenge. For each dimension the range of score is 10-50 whereas range of personality hardiness score lies between 30-150. Higher the score in control, commitment, and challenge dimensions indicates a robust presence of control trait, commitment, challenge tendency and being a hardy student. The table 3.31 displays the description of total 30 statements of the measure into its three components.

**TABLE 3.31**

#### **DISTRIBUTION OF THE ITEMS OF PERSONALITY HARDINESS SCALE**

<b>S. No.</b>	<b>Dimensions</b>	<b>Item no.</b>	<b>Total Items</b>
1	Control	2, 5, 6, 7,11,19, 22, 24,25 and 30	10
2	Commitment	1, 8, 9, 10, 13, 14, 17, 18, 23 and 29	10
3	Challenge	3, 4, 12, 15,16, 20, 21, 26, 27 and 28	10

#### • **SCORING OF THE SCALE**

For the purpose of scoring, a five-point rating scale was used in Nowack's Personality Hardiness Scale. The options were 5=Strongly Agree to 1=Strongly Disagree). The personality hardiness scale has 17 positive and 13 negative items. The

following table presents the scoring pattern and classification of test items into positive and negative test items.

**TABLE 3.32**  
**SCORING PATTERN OF PERSONALITY HARDINESS SCALE (PHS)**

Types of Items	No. of Items	Item Number	SCORES				
			SA	A	NAD	DA	SD
Positive	17	7, 8, 9, 10, 11, 12, 15, 17, 20, 21, 23, 24, 25, 26, 27, 28 and 29	5	4	3	2	1
Negative	13	1, 2, 3, 4, 5, 6, 13, 14, 16, 18, 19, 22, and 30	1	2	3	4	5

**Note:** SA=strongly agree, A=agree, NAD= neither agree nor disagree, DA=disagree, SD=strongly disagree

- **RELIABILITY OF THE SCALE**

Personality hardiness scale has statements which were associated only with the hardiness domains. So, it was considered valid as per content wise. Besides, it has confirmed criterion associated validity with both objective and subjective health outcomes in a several research studies (Greene & Nowack, 1995). Before using this scale in the present investigation, it was administered to a group of four hundred fifty undergraduate students. The reliability co-efficient (Table 3.33) was found to be  $\alpha = .902$ ,  $\alpha = .779$ ,  $\alpha = .856$ , and  $\alpha = .901$  for commitment, control, challenge and total personality hardiness scale respectively. The reliability co-efficient of all constructs have acceptable values as recommended by Heir et al. (2010). So, the tool was finally approved for being used in the present investigation. A copy of scale has been placed in Appendix-III.

**TABLE 3.33**  
**RELIABILITY STATISTICS OF THE PERSONALITY HARDINESS SCALE**

S. No	Constructs	A	Number of items
01	Commitment	.902	10
02	Control	.779	10
03	Challenge	.856	10
<b>04</b>	<b>Total PHS</b>	<b>.901</b>	<b>30</b>



- **DEVELOPMENT OF NORMS**



The respondents of the study were selected from Jammu and Kashmir using random sampling technique ensuring that participants are appropriate in terms of representativeness and adequacy for proposed population. The scale consists of 30 items related to personality hardiness. The range of individual respondents score calculated from raw score on present scale is 30 to 150, on the basis of descriptive statistics, z-score norms based on 450 responses have been prepared. The mean score of personality hardiness scale is 100.57 and standard deviation is 14.52. Norms for interpretation of the levels of personality hardiness scale (PHS) have been presented in table 3.34 and table 3.35.

**TABLE 3.34**

**Z-SCORE NORMS OF PERSONALITY HARDINESS SCALE (PHS)**

<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>	<b>Raw Score</b>	<b>Z-Score</b>
57	-3.00	58	-2.93	59	-2.86	60	-2.79	61	-2.72
62	-2.65	63	-2.58	64	-2.51	65	-2.44	66	-2.38
67	-2.31	68	-2.24	69	-2.17	70	-2.10	71	-2.03
72	-1.96	73	-1.89	74	-1.83	75	-1.76	76	-1.69
77	-1.62	78	-1.55	79	-1.48	80	-1.41	81	-1.34
82	-1.27	83	-1.21	84	-1.14	85	-1.07	86	-1.00
87	-0.93	88	-0.86	89	-0.79	90	-0.72	91	-0.65
92	-0.59	93	-0.52	94	-0.45	95	-0.38	96	-0.31
97	-0.24	98	-0.17	99	-0.10	100	-0.03	101	+0.02
102	+0.09	103	+0.16	104	+0.23	105	+0.30	106	+0.37
107	+0.44	108	+0.51	109	+0.58	110	+0.64	111	+0.71
112	+0.78	113	+0.85	114	+0.92	115	+0.99	116	+1.06
117	+1.13	118	+1.20	119	+1.26	120	+1.33	121	+1.40
122	+1.47	123	+1.54	124	+1.61	125	+1.68	126	1.75
127	+1.82	128	+1.88	129	+1.95	130	+2.02	131	+2.09
132	+2.16	133	+2.23	134	+2.30	135	+2.37	136	+2.44
137	+2.50	138	+2.57	139	+2.64	140	+2.71	141	+2.78
142	+2.85	143	+2.92	144	+2.99	145	+3.05	146	+3.12
147	+3.19	148	+3.26	149	+3.33	150	+3.40		

**TABLE 3.35**  
**NORMS FOR INTERPRETING THE LEVELS OF PERSONALITY HARDINESS SCALE (PHS) AND ITS**  
**DIMENSIONS**

<b>Constructs</b> 	<b>Control</b>	<b>Commitment</b>	<b>Challenge</b>	<b>TPHS</b>
Levels of TPHS 	Range of Z-Score	Range of Z-Score	Range of Z-Score	Range of Z-Score
Very High	+1.83 & above	+1.92 & above	+1.88 & above	+1.76 & above
High	+0.96 to + 1.82	+1.03 to + 1.91	+0.86 to +1.87	+1.00 to +1.75
Average	-1.04 to +0.95	-0.91 to +1.02	-0.99 to +0.85	-0.99 to +0.99
Low	-2.05 to -1.05	-1.98 to -0.92	-2.01 to -1.00	-2.02 to -1.00
Very low	-2.06 & below	-1.99 & below	-2.02 & below	-2. 03 & below

### **3.4 PROCEDURE OF DATA COLLECTION**

A demographic profile sheet was prepared to gather general information about the participants which include name, class, age, sex, SES, etc. Then all the participants were contacted personally after taking permission from the higher officials in each college. Investigator introduced himself as a research scholar and told them about the academic purpose and application of the present study. They were requested to answer frankly and honestly as the information was to be kept confidential and to be used for research purposes only. Demographic profile was used to establish a good rapport, and then, all the questionnaires were given to the subjects, one at a time and they were requested to read the directions given on the top of each scale or questionnaire. Researcher has described concisely but clearly the purpose of the research study and requested undergraduate students to fill up general information given in a separate Performa. If they did not understand anything, it was made clear by the investigator. It was made clear that there were no “right” or “wrong” responses and if they had any queries, they could ask the investigator. The investigator tried to complete all tests to each subject in a single day. The procedure of test administration was uniform for all the subjects. The participants were assured that their answers would be kept confidential. Due care was taken that the participants did not leave any statement unmarked. So, scoring was done according to directions given in the respective manuals.

### **3.5 STATISTICAL TECHNIQUES**

In order to examine the collected data with appropriate statistical methods, the following statistical techniques were used in present study:

1. In order to find out the levels of personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students, descriptive statistics was used.
2. In order to find out relationship of personality hardiness, anomie, and contextual influences with academic dishonesty of undergraduate students, Pearson coefficient of correlation was used.
3. To study the differences in personality hardiness, academic dishonesty, anomie, and contextual influences of undergraduate students, ANOVA and t-test was employed.

4. To determine the contribution of personality hardiness, anomie, and contextual influences to academic dishonesty of undergraduate students, multiple regression analysis was employed.
5. To determine the contribution of various dimensions of personality hardiness, anomie, and contextual influences to academic dishonesty of undergraduate students, step-wise regression analysis was employed.

## CHAPTER IV

### ANALYSIS AND INTERPRETATION

The crucial stage in the practice of educational research, after the collection of data, is the analysis and discussion of the data and arriving at the conclusions and generalizations to get a noteworthy representation of the raw evidences thus collected. Present chapter highlights the use of various statistical tools for analysis of the data. Data is a meaningless heap of information unless a researcher does not classify it systematically, analyze scientifically, interpret intelligently and conclude rationally. The data analysis was carried by suitable quantitative statistical analysis techniques applying both descriptive (mean, standard deviation, percentage) and inferential statistics (Analysis of Variance (ANOVA), t-test, Pearson's product-moment correlation, multiple and step-wise regression analysis).

As stated above, the current chapter deals with the statistical analysis and discussion of the results. This was done in six sections; the first part of statistical analysis presents data screening of the collected data. The second part presents descriptive statistics of the sample e.g. descriptive statistics of the participants (N = 1170) of the study. The third section of the analysis deals with Analysis of Variance (ANOVA). In order to find out the association between demographic variables and research variables of the study, ANOVA has been applied. The fourth section presents the results of Pearson's product-moment correlation, done to find out the significant association between independent and dependent constructs. The fifth part presents the output of regression analysis by applying multiple regression technique. Multiple regression analysis technique is a multivariate statistical technique used to examine the predictive power of variables. The sixth section presents the results of step-wise regression analysis, the most popular sequential statistical method which enables the investigator to examine the prediction of each independent construct to the regression model. Further, the data have been analyzed and presentation of the results and their interpretation has been done objective wise which are presented as per following breakups.

## **4.1. Data Screening**

### **4.2 Descriptive Statistics of the Sample**

4.2.1. Academic dishonesty of undergraduate students

4.2.2. Dimension-wise sample distribution on academic dishonesty of undergraduate students

4.2.3. Anomie of undergraduate students

4.2.4. Dimension-wise sample distribution on anomie of undergraduate students

4.2.5. Personality hardiness of undergraduate students

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### **4.3. Comparison of academic dishonesty, anomie, personality hardiness and contextual influences of undergraduate students with respect to gender, age, socio-economic status and region of college campuses**

4.3.1. Summary of 2x2x2 analysis of variance (ANOVA) of academic dishonesty among undergraduate students with respect to gender, age and socio-economic status

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4.3.3. Summary of 2x2x2 analysis of variance (ANOVA) on the scores of personality hardiness with respect to gender, age and socio-economic status

4.3.4. Summary of 2x2x2 analysis of variance (ANOVA) on the scores of contextual influences with respect to gender, age and socio-economic status

4.3.5. Summary of analysis of variance (ANOVA) on the scores of academic dishonesty of undergraduate students with respect to region of college campuses

4.3.6. Summary of analysis of variance (ANOVA) on the scores of anomie of undergraduate students with respect to region of college campuses

4.3.7. Summary of analysis of variance (ANOVA) on the scores of personality hardiness of undergraduate students with respect to region of college campuses

4.3.8. Summary of analysis of variance (ANOVA) on the scores of contextual influences of undergraduate students with respect to region of college campuses

#### **4.4 Relationship of academic dishonesty with anomie, personality hardiness and contextual influences of undergraduate students**

4.4.1. Correlation between academic dishonesty and anomie of undergraduate students

4.4.2 Correlation between academic dishonesty and personality hardiness of undergraduate students

4.4.3 Correlation between academic dishonesty and contextual influences of undergraduate students

#### **4.5. Multiple regression analysis between personality hardiness, anomie, contextual influences (independent variables) and academic dishonesty (dependent variable) of undergraduate students**

4.5.1. Multiple regression analysis between personality hardiness, anomie, contextual influences (independent variables) and academic dishonesty (dependent variable) of undergraduate students

#### **4.6. Stepwise regression analysis between dimensions of anomie, personality hardiness, contextual influences (independent variables) and academic dishonesty (dependent variable) of undergraduate students**

4.6.1. Stepwise regression analysis between dimensions of anomie (independent variables) and academic dishonesty (dependent variable) of undergraduate students

4.6.2. Stepwise regression analysis between dimensions of personality hardiness (independent variables) and academic dishonesty (dependent variable) of undergraduate students

4.6.3. Stepwise regression analysis between dimensions of contextual influences (independent variables) and academic dishonesty (dependent variable) of undergraduate students

## **SECTION 1**

### **4.1. DATA SCREENING**

Investigation of data entries was rigorously processed with the objective to analyze the data for identification of missing values and outliers (responses falling outside the range). According to Van den Broeck, Cunningham, Eeckels, and Herbst (2005) data screening is a process of quality assurance which facilitates a researcher with screening/monitoring, diagnosing and eliminating abnormalities of a data set. Due to its diverse benefits data screening has attained a considerable attention of researchers (Hadi, 1992). The primary purpose of data screening is to identify and remove the errors and minimize their effect on obtained results. In the present study, prior to analysis, all data entries were rigorously analyzed for missing values and outliers using SPSS-22 version software. The linearity and normality of the scales/data were also screened through the investigation of the skewness, histograms, kurtosis, normality plots, Q-Q plots, scatter plots, P-P plots and box plots in order to meet the assumptions of the multivariate measurements. The scatter plots inspected for determining the linearity of the associations of the research constructs showed that the assumption of linearity was met. All of the research constructs were normally distributed in terms of normality. Therefore, descriptive and inferential statistics were used to analyze the study variables in order to get remarkable results.

## **SECTION 2**

### **4.2. DESCRIPTIVE STATISTICS OF THE SAMPLE**

This section deals with descriptive statistics of the 1170 undergraduate students. In statistics, the most basic form is descriptive statistics and is applied to describe the overall sample selected for the study. Therefore, percentage technique is used and is one of the statistical methods used to describe the sample of the study. So, the first objective of the present study is “to explore the level of personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students”. The distribution of sample based on the above stated analysis is given in the Table 4.1 to Table 4.8 respectively.



#### 4.2.1. ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS.

This section deals with the data related to the academic dishonesty of undergraduate students based on overall sample distribution. The Table 4.1 presents the percentage-wise levels of academic dishonesty among undergraduate students.

**TABLE 4.1**

**PERCENTAGE-WISE LEVELS OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS**

<b>Sr. No.</b>	<b>LEVELS OF ACADEMIC DISHONESTY</b>	<b>N</b>	<b>%age</b>
01	High Academic dishonesty	00	00
<b>02</b>	<b>Above Average Academic dishonesty</b>	<b>246</b>	<b>21.03</b>
03	Average Academic dishonesty	703	60.09
<b>04</b>	<b>Below Average Academic dishonesty</b>	<b>200</b>	<b>17.09</b>
05	Low Academic dishonesty	21	1.79
<b>Total</b>		<b>1170</b>	<b>100%</b>

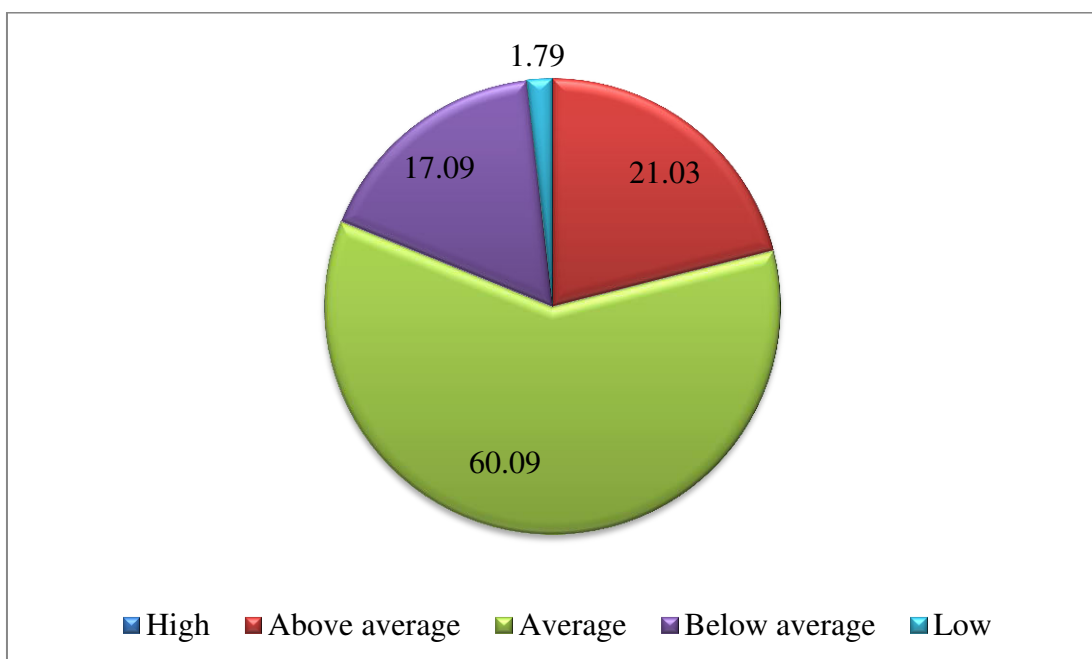
The above results showing pervasiveness rate of academically dishonest practices among undergraduate students. Results presented in Table 4.1 displays that 00% (n = 00) students are involved in high level of academic dishonest practices. Whereas, 21.03% (n = 246) undergraduate students possess above average academic dishonesty. The highest percentage of students in total sample i.e. 60.09% (n = 703) reported average level and 17.09% (n = 200) students possess below average level of academic dishonesty. About 1.79% (n = 21) undergraduate students exhibit low level of academic dishonest practices. The top most academically dishonest practices of undergraduate students are: using signals to fetch answers from friends, passed responses to other students, provided prohibited help to others on their project, provided assignment for other student and copied from other students.

The observation of the results suggest that highest percentage of the sample stated in average level followed by above average, below average, low and high level of dishonest academic practices respectively. The highest frequency of student performance of dishonest academic practices may be due to the reason that today's civilizations are goal driven; undergraduates are looking to achieve things quicker and in any possible method to gain outcomes. It is becoming more competitive to be admitted into best universities or job. The stress and pressure essential to strive and

flourish in campus settings are what lead the majority of undergraduate students to resort to dishonest academic acts. However, it has been assessed that the incidence of academic dishonesty in campuses suggests that the majority of all students cheat at some point in their educational endeavor (Davis, Grover, Becker, & McGregor, 1992). The present study revealed that academic dishonesty among undergraduate students is pervasive, which indicates that students are not fully aware of what constitutes academic dishonesty (Petress, 2003; McCabe et al., 2001; McCabe, 1993). Similarly, Ryan et al. (2009) asserted that students are not aware about campus rules on plagiarism and academic dishonesty.

**FIGURE 4.1**

**GRAPHICAL REPRESENTATION OF DIFFERENT LEVELS OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS**



This result is consistent with Kaur (2011); it revealed that majority of students fall in average level of academic dishonesty in Haryana. Babu et al. (2011) conducted a study in Pondicherry, India and found that 74.00% of students have copied from their friends while as Petrak and Bartolac (2013) found that 98.40% of the students stated that they had copied from others during an exam. On the other hand, Grimes and Rezek (2005) asserted that no attention is paid in high frequency of academic dishonesty in teacher administered exams. Similarly, McCabe & Trevino, (1997) asserted that 70.00% of students in 1993 reported to having cheated on a test and

87.00% cheated on written work. Moreover, 52.00% copied from another student, and 25.00% plagiarized. Similarly, Tadesse and Getachew (2010) found that 96.40% of participants admitted in involving on assignment-associated dishonesty and 82.00% on exam-associated ones, and recent investigation shows that, on average, about 80.00% of students cheat in some way (Witherspoon, Maldonado, & Lacey, 2012). Further, Figure 4.1 showing graphical representation of levels on dishonest academic acts of undergraduate students.

#### 4.2.2. DIMENSION-WISE LEVELS OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS

This analysis is related to dimensions of academic dishonesty of undergraduate students i.e. cheating in examination, plagiarism, outside help, prior cheating, falsification, and lying about academic assignments. Dimension wise levels of academic dishonesty among undergraduate students is given below in Table 4.2.

**TABLE 4.2**  
**DIMENSION-WISE LEVELS OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS**

Levels Dimensions	→						Total
	High	Above Average	Average	Below Average	Low		
Cheating in Examination	N %	00 00	103 8.80	805 68.80	159 13.60	103 8.80	1170 100%
Plagiarism	N %	00 00	293 25.04	550 47.00	327 27.96	00 00	1170 100%
Outside help	N %	00 00	00 00	872 74.53	174 14.87	124 10.60	1170 100%
Prior cheating	N %	00 00	385 32.90	428 36.58	253 21.62	105 8.90	1170 100%
Falsification	N %	00 00	264 22.56	617 52.74	287 24.53	02 0.17	1170 100%
Lying about academic assignments	N %	00 00	343 29.32	561 47.95	257 21.97	09 0.76	1170 100%

It is clear from Table 4.2 that with cheating in examination, about 00% (n=00) undergraduate students in the study fall in high level of involvement in dishonest academic practices during examination. About 8.80% (n=103) undergraduate students exhibited above average level in examination related cheating. The highest percentage

68.80% (n=805) of the undergraduate students exhibited average level of involvement in academic cheating. About 13.60% (n=159) of the undergraduate students exhibited below average level in engagement of examination related cheating. In addition, 8.80% (n=103) indicated low level of involvement in dishonest academic acts in examination. The top most practices of cheating in examination of undergraduate students are: copying, using prohibited things, interchange allotted answer book/question paper, etc. The observation of the results suggest that highest percentage of the sample reported in average level followed by below average, above average, low and high level of cheating in examination.

In plagiarism, 00% (n=00) of the undergraduate students exhibit high level of plagiarism. About 25.04% (n=293) exhibited above average level of plagiarism. The highest percentage of students, 47.00% (n=550) exhibited average level of plagiarism. In below average level of plagiarism, there are 27.96% (n=327) students. In low level plagiarism, 00% (n=00) fall under this level. The top most plagiarism practices of undergraduate students are: copying summary of a story/poem/chapter from a textbook & claiming it as completed by them, copying and changing few sentences/lines/words and phrases from other sources and using online resources in personal educational assignment/project without citing the author. The observation of the results suggest that highest percentage of the sample reported in average level followed by below average, above average, high and low level of plagiarism. The reason may be undergraduate students' ignorance about what constitutes plagiarism and academic dishonesty (Ryan et al., 2009).

Further, it is obvious from Table 4.2 that only 0.0% (n=00) undergraduate students fall in high level of outside help. Similarly, about 00% (n=00) students fall under above average level of outside help, 74.53% (n=872) to the average level, 14.87% (n=174) to the below average level and 10.60% (n = 124) to the low level of outside help. The reflection of the results suggest that maximum percentage of the sample reported in average level followed by below average, above average, low and high level of outside help. The utmost outside help practices of undergraduate students are: taking help from others to complete individual assignments, using unfair means to obtain information about the content of the test, knowing questions asked in paper and making special considerations to attain or getting favors.

In the cheating dimension, 00% (n=00) undergraduate students fall under high level, 32.90% (n=385) to the above average level, 36.58% (n=428) to the average level, 21.62% (n=253) to the below average and 8.90% (n=105) to the low level of prior cheating. The empirical investigation suggests that maximum undergraduate students fall in average level followed by above average, below average and low level of prior cheating. The topmost prior cheating practices of undergraduate students are: writing expected answers on table/wall/hand/paper etc. in prior time, interchanging allotted seats with another student to get better grade in examination and encouraging other classmates to do dishonest academic practices.

In the falsification dimension, 0.0% (n=00) students fall under high level of falsification, 22.56% (n=264) to the above average level, 52.74% (n=617) to the average level, 24.53% (n=287) to the below average level and 0.17% (n=02) to the low level of falsification. Maximum undergraduate students fall in average level followed by below average, above average, low and high level of falsification. The topmost falsification practices are: submitting the assignment after getting it prepared by another student, damaging library books so that classmates do not get required content and submitting the same home assignment more than one time.

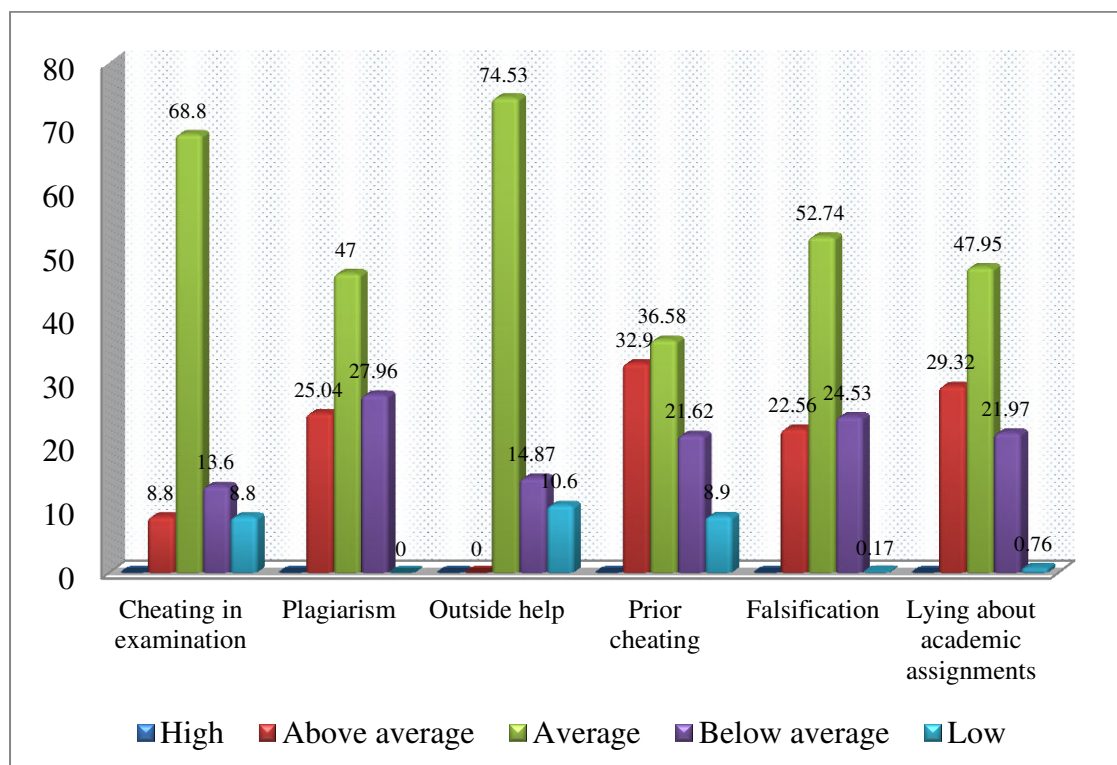
For lying about academic assignments dimension, 00% (n=00) students exhibit high level of lying about academic assignments. About 29.32% (n=343) exhibit above average level of lying about academic assignments. The highest percentage of 47.95% (n=561) undergraduate students fall under average level. Similarly, 21.97% (n=257) students fall under below average level of lying about academic assignments. Lastly, 0.76% (n=09) students fall under low level of lying about academic assignments. The highest magnitude of percentage of undergraduate students in lying about academic assignments fall in average level followed by above average, below average and low level respectively. The academic assignments practices are: giving false explanations when missing deadline of educational project and providing false excuses to teacher, and to gain extra time on project/assignment. The possible explanation may be pressure to complete course with elite percentage or get admission in renowned university or job (Taylor et al., 2003; Wideman, 2008).

In fact, it has been estimated that the occurrence of academic dishonesty in institutions suggest that the majority of all students cheat at some point in their academic endeavor (Davis et al., 1992). As Abusafia et al. (2018) showed that 82.10%

of students had engaged in an act of academic dishonesty in an academic setting and the most frequent form of academic dishonesty in an academic setting was plagiarism (77.10%). Similarly, Harding (2001) reported that large number of students who admitted to having copied another student’s homework (74.00%), copied passages from a textbook for homework assignments (62.00%) and shared answers with friends in a difficult class (51.00%) supports this study. In addition, Davis et al. (1992); McCabe & Trevino (1997) asserted that as many as 80.00% to 90.00% of students cheat before graduation. Park (2003) stated that at least 50.00% of students cheat. Kidwell, Wozniak, and Laurel (2003), and Chapman et al. (2004) found that 75.00% of students were reported cheating. Their findings are similar to the 63.00% found by Nonis and Swift (1998). In India, Babu et al. (2011) reported that during a theory exam, 74.00% of students have copied from their friends, and 81.00% have got technical help. Kaur (2011) found that majority of students fall in average level of academic cheating in Haryana. Further, Figure 4.2 shows graphical representation of levels on dishonest academic acts of undergraduate students.

**FIGURE 4.2**

**GRAPHICAL REPRESENTATION OF DIMENSION-WISE LEVELS OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS**



### 4.2.3. ANOMIE AMONG UNDERGRADUATE STUDENTS

This section deals with the analysis related to anomie among undergraduate students. Table 4.3 presents the percentage-wise levels of anomie among undergraduate students.

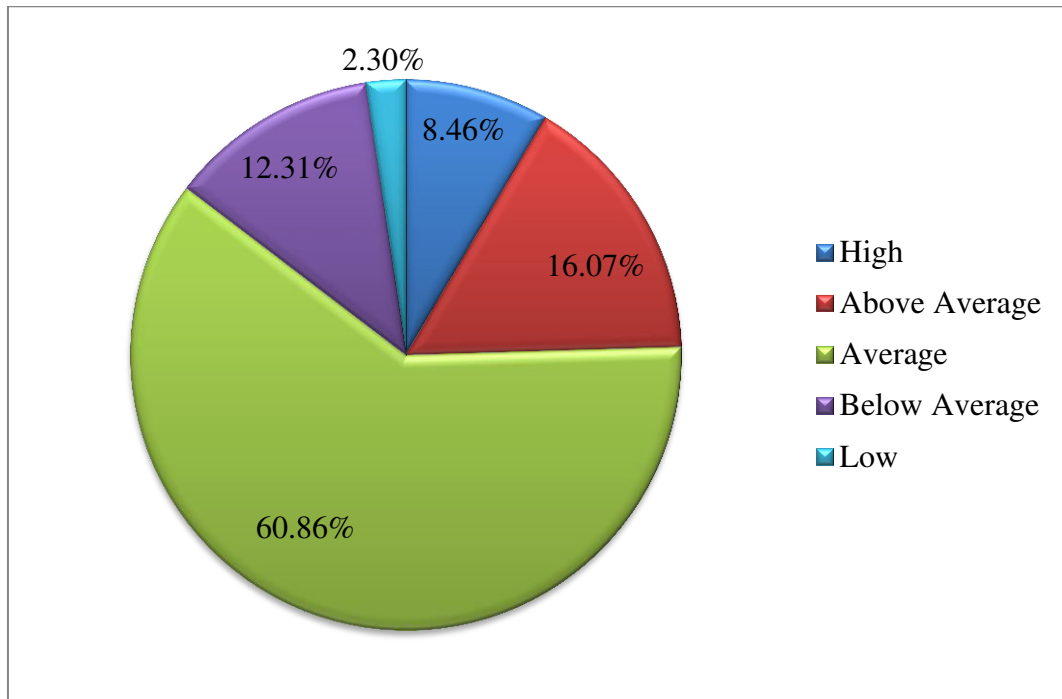
**TABLE 4.3**  
**PERCENTAGE-WISE LEVELS OF ANOMIE AMONG UNDERGRADUATE STUDENTS**

<b>Sr.</b>	<b>LEVELS OF ANOMIE</b>	<b>N</b>	<b>% age</b>
01	High Anomie	99	8.46
<b>02</b>	<b>Above Average Anomie</b>	<b>188</b>	<b>16.07</b>
03	Average Anomie	712	60.85
<b>04</b>	<b>Below Average Anomie</b>	<b>144</b>	<b>12.31</b>
05	Low Anomie	27	2.31
<b>Total</b>		<b>1170</b>	<b>100%</b>

Results presented in Table 4.3 display that 8.46% (n=99) undergraduate students perceive high level of anomie. Whereas, 16.07% (n=188) undergraduate students possess above average level of anomie. The highest percentage of students in total sample i.e. 60.85% (n=712) reported average level and 12.31% (n=144) students possess below average level of anomie. Further, 2.31% (n=27) undergraduate students exhibit low level of anomie.

The observation of the results suggest that highest percentage of anomie was reported in average level followed by above average, below average, high and low level of anomie respectively. The highest percentage of undergraduate students perceives average level of anomie. The main reasons may be breakdown in social fabric, deterioration of moral standards in society, mistrust in higher public officials, unemployment and no clear cut procedures in recruitment of public jobs. In other words, social fabric has eroded and affected the relationships between individuals and society (Quenza, 2009). This result is consistent with Yingli et al. (2014), who found that academic moral anomie is common among undergraduate students. Similarly, Baharak and Mahmood (2010) revealed that feeling of anomie among students is very high. Further, Figure 4.3 shows graphical representation of different levels of anomie among undergraduate students.

**FIGURE 4.3**  
**GRAPHICAL REPRESENTATION OF DIFFERENT LEVELS OF ANOMIE**  
**AMONG UNDERGRADUATE STUDENTS**



**4.2.4. DIMENSION-WISE ANOMIE AMONG UNDERGRADUATE STUDENTS**

This analysis is related to levels of anomie among undergraduate students based on three dimensions viz: meaninglessness, distrust and moral decline. Dimension-wise levels of anomie among undergraduate students are given in Table 4.4.

**TABLE 4.4**  
**DIMENSION-WISE LEVELS OF ANOMIE AMONG UNDERGRADUATE STUDENTS**

<b>Levels</b> →		<b>High</b>	<b>Above Average</b>	<b>Average</b>	<b>Below Average</b>	<b>Low</b>	<b>Total</b>
<b>Dimensions</b> ↓							
<b>Meaninglessness</b>	<b>N</b>	130	290	613	108	29	<b>1170</b>
	<b>%</b>	<b>11.11</b>	<b>24.78</b>	<b>52.40</b>	<b>9.23</b>	<b>2.47</b>	<b>100</b>
<b>Distrust</b>	<b>N</b>	03	143	678	341	05	1170
	<b>%</b>	<b>0.26</b>	<b>12.22</b>	<b>57.95</b>	<b>29.14</b>	<b>0.43</b>	<b>100</b>
<b>Moral Decline</b>	<b>N</b>	149	225	606	169	21	1170
	<b>%</b>	<b>12.74</b>	<b>19.23</b>	<b>51.80</b>	<b>14.44</b>	<b>1.79</b>	<b>100</b>



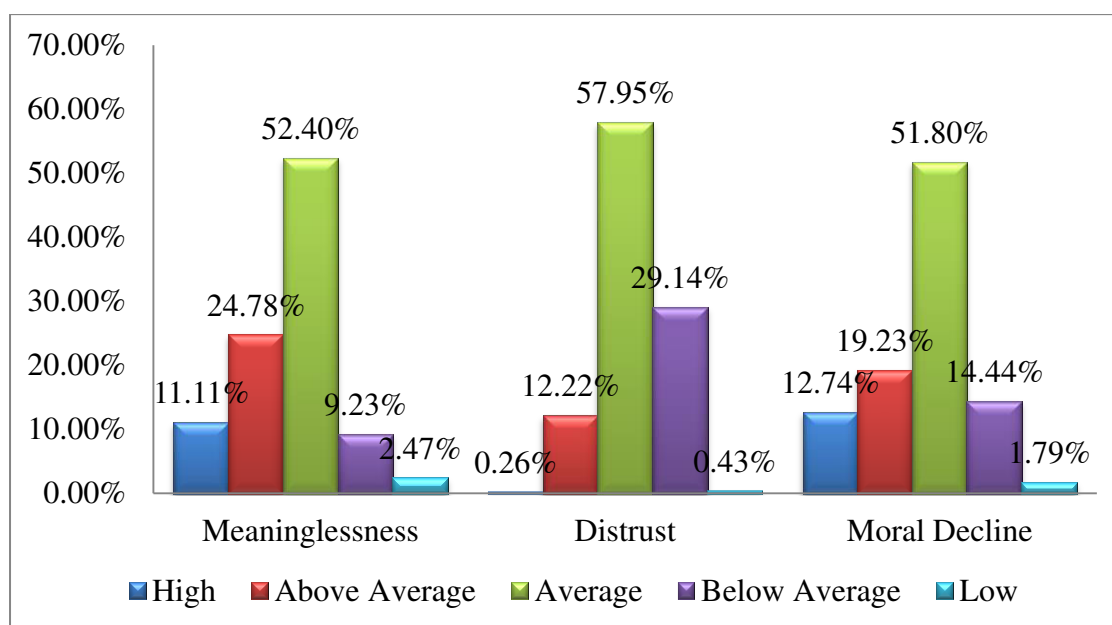
On analyzing dimension-wise levels of anomie among undergraduate students; in meaningfulness dimension of anomie, the results revealed that 11.11% (n=130) undergraduate students reported on high level, 24.78% (n=290) on above average level. The maximum percentage 52.40% (n=613) of the undergraduate students fall in the average level of the meaningfulness dimension of anomie. Tables 4.4 further reveals that 9.23% (n=108) students exhibit below average level of anomie and 2.47% (n=29) students exhibit low level of meaningfulness. The highest magnitude of percentage of the undergraduate students fall in the average level followed by above average, high, below average and low level of the meaningfulness dimension of anomie. The main reason may be that students feel that their life is getting worse day by day because their future is determined by higher officials that lead them to get feeling of loneliness, meaningless and confusion about rules.

While observing the distrust domain of anomie, results revealed that 0.26% (n=03) undergraduate students show high level of distrust. Further, 12.22% (n=143) undergraduate students fall in above average level of distrust. The maximum percentage of the undergraduate students fall in average level of distrust i.e. 57.95% (n=678), whereas 29.14% (n=341) students possess below average level of distrust. About 0.43% (n=05) students exhibited low level of distrust. The highest magnitude of percentage fall in average level followed by below average, above average, low and high level of distrust respectively. The main reason may be students perceive that people are self-interested they don't care each other. On the other hand, massive unemployment in society that increases educated youths' perception of distrust on people, society and public officials (Channabasavanna & Bhatti, 1975).

Exploring the moral decline domain, the results showed that 12.74% (n=149) of undergraduate students believed in high level of moral decline, 19.23% (n=225) undergraduate students believed in above average level of moral decline. Moreover, the highest percentage 51.80% (n=606) undergraduate students believed in average level of moral decline, 14.44% (n=169) students believed in below average level of moral decline and 1.79% (n=21) undergraduate students believed in low level of moral decline. The results suggest that maximum percentage of undergraduate students reported in average level followed by above average, below average, high and low level of moral decline respectively. The possible explanations may be dishonesty in society where morality doesn't work, absence of moral standards, no

discrimination between right versus wrong and rejection of laws of society. For further understanding figure 4.4 shows dimension-wise levels of anomie among undergraduate students.

**FIGURE 4.4**  
**GRAPHICAL REPRESENTATION OF DIMENSIONS-WISE LEVELS OF ANOMIE AMONG UNDERGRADUATE STUDENTS**



#### 4.2.5. PERSONALITY HARDINESS AMONG UNDERGRADUATE STUDENTS

This section deals with the analysis related to personality hardiness among undergraduate students. Table 4.5 presents the analysis of different levels of personality hardiness among undergraduate students.

**TABLE 4.5**  
**PERCENTAGE-WISE LEVELS OF PERSONALITY HARDINESS AMONG UNDERGRADUATE STUDENTS**

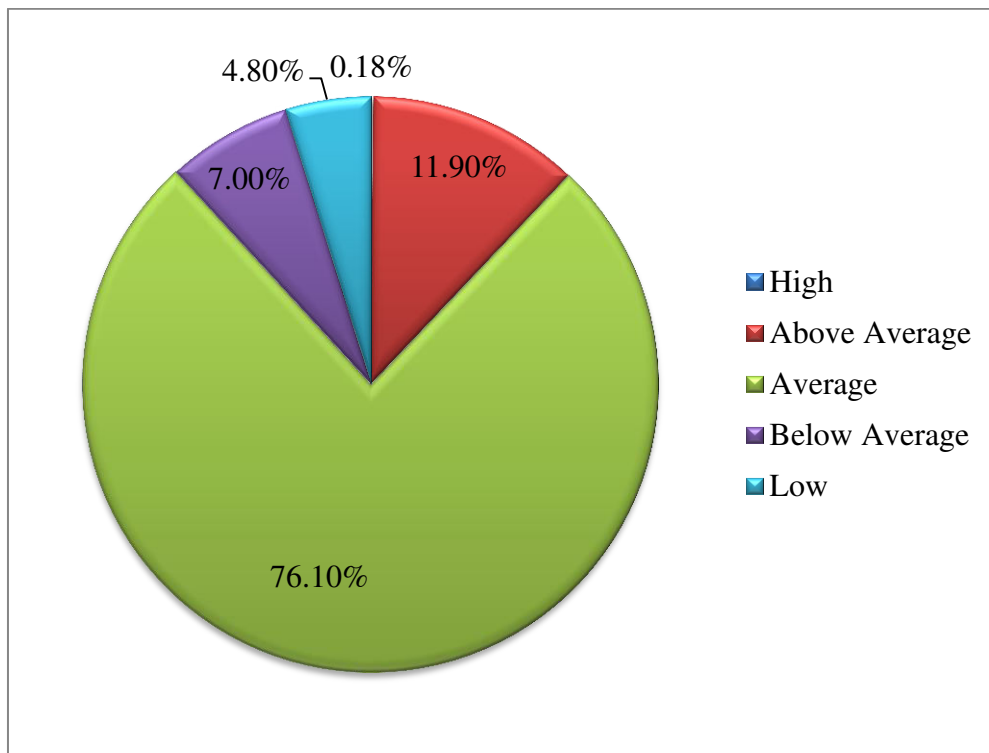
Sr.	LEVELS OF PERSONALITY HARDINESS	N	%age
01	High Personality Hardiness	02	<b>0.18</b>
02	Above Average Personality Hardiness	139	<b>11.90</b>
03	Average Personality Hardiness	890	<b>76.10</b>
04	Below Average Personality Hardiness	82	<b>7.00</b>
05	Low Personality Hardiness	57	<b>4.80</b>
<b>Total</b>		<b>1170</b>	<b>100%</b>

Table 4.5 shows percentage-wise levels of levels of personality hardiness among undergraduate students. It is clear from table 4.5 that 0.18% (n=02) students possess high level of personality hardiness. Similarly, 11.90% (n=139) undergraduate students possess above average level of personality hardiness. The highest percentage 76.10% (n=890) of undergraduate students possess average level of personality hardiness. The results further displayed that 7.00% (n=82) undergraduate students possess below average level of personality hardiness. Only 4.80% (n=57) undergraduate students possess low level of personality hardiness.

The observation of the above results suggest that highest percentage of the undergraduate students possess average level followed by above average, below average, low and high level of personality hardiness respectively. The reason may be that undergraduate students' average involvement in college-work activities that provides them average self-conscious or confidence in daily life routine and lifestyle. Figure 4.5 indicates graphical representation on different levels of personality hardiness of undergraduate students.

**FIGURE 4.5**

**GRAPHICAL REPRESENTATION OF LEVELS OF PERSONALITY HARDINESS AMONG UNDERGRADUATE STUDENTS**



#### 4.2.6. DIMENSION-WISE LEVELS OF PERSONALITY HARDINESS AMONG UNDERGRADUATE STUDENTS

This analysis is related to dimensions of personality hardiness i.e. control, commitment and challenge among undergraduate students. Results of the dimension-wise analysis of personality hardiness among undergraduate students is given in Table 4.6.

**TABLE 4.6**  
**DIMENSION-WISE LEVELS OF PERSONALITY HARDINESS AMONG UNDERGRADUATE STUDENTS**

Levels	High	Above	Average	Below	Low	Total
Dimensions	Average			Average		
<b>Control</b>	N 00	151	894	52	73	1170
	% <b>0.00</b>	% <b>12.91</b>	% <b>76.41</b>	% <b>4.44</b>	% <b>6.24</b>	% <b>100</b>
<b>Commitment</b>	N 00	76	1000	94	00	1170
	% <b>0.00</b>	% <b>6.50</b>	% <b>85.47</b>	% <b>8.03</b>	% <b>0.00</b>	% <b>100</b>
<b>Challenge</b>	N 01	80	863	150	76	1170
	% <b>0.08</b>	% <b>6.84</b>	% <b>73.76</b>	% <b>12.82</b>	% <b>6.50</b>	% <b>100</b>

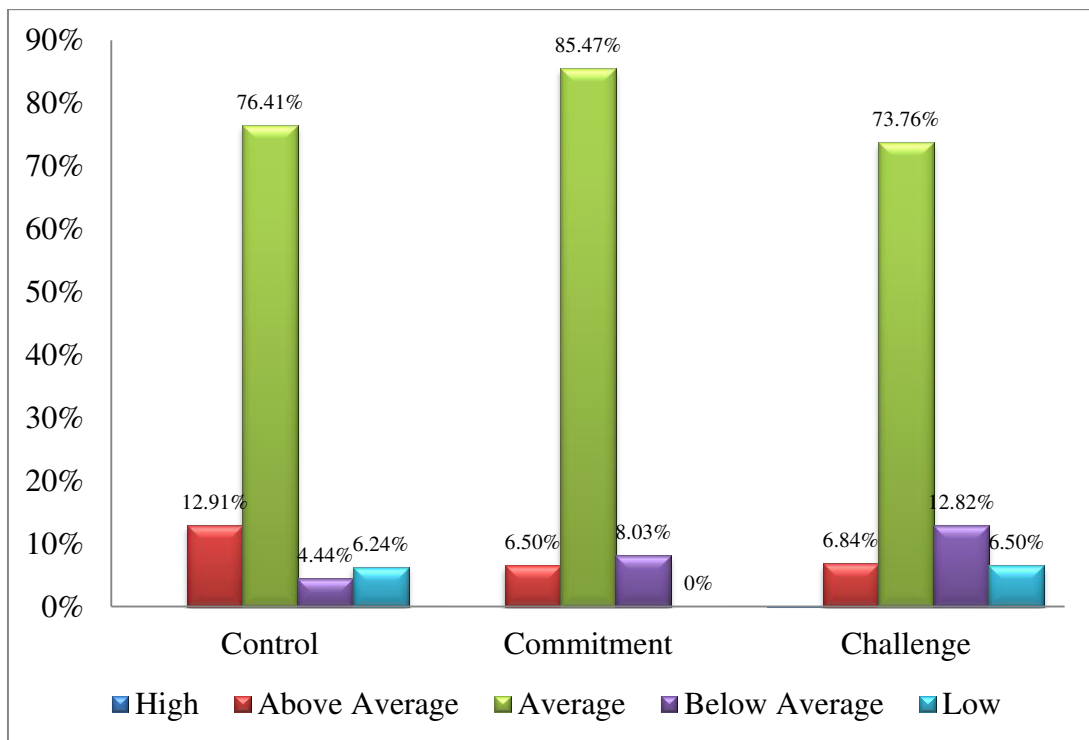
On analyzing control dimension of undergraduate students, results revealed that 0.00% (n=00) undergraduate students possess high level, 12.91% (n=151) on above average level. The maximum percentage 76.41% (n=894) of the undergraduate students possess average level of the control dimension of personality hardiness. The Table 4.6 further revealed that 4.44% (n=52) undergraduate students possess below average level and 6.24% (n=73) undergraduate students possess low level of control dimension of personality hardiness. The highest magnitude of percentage fall in average level followed by above average, low and below average of control dimension of personality hardiness.

While observing the commitment dimension of personality hardiness, results revealed that undergraduate students show 0.00% (n=00) high level of commitment. Further, 6.50% (n=76) undergraduate students exhibit above average level of commitment. The maximum percentage of the undergraduate students exhibit average level of commitment, 85.47% (n=1000), whereas 8.03% (n=94) students possess below average level of commitment. About 0.00% (n=00) undergraduate students

exhibit low level of commitment. The highest magnitude of percentage falls in average level followed by below average and above average level of commitment among undergraduate students.

Exploring the challenge dimension, the results showed that 0.08% (n=01) of undergraduate students exhibit high level of challenge behaviour, 6.84% (n=80) undergraduate students exhibit average level of challenge behaviour. The highest percentage 73.76% (n=863) undergraduate students exhibit average level of challenge, 12.82% (n=150) students exhibit below average level of challenge and 6.50% (n = 76) undergraduate students exhibit low level of challenge. The results suggest that maximum percentage of undergraduate students reported average level followed by below average, above average and low level of ‘challenge’ component of personality hardiness. Figure 4.6 provides further understanding of levels of dimensions of personality hardiness of undergraduate students.

**FIGURE 4.6**  
**GRAPHICAL REPRESENTATION OF DIFFERENT LEVELS OF**  
**DIMENSIONS OF PERSONALITY HARDINESS AMONG**  
**UNDERGRADUATE STUDENTS**



#### 4.2.7. CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS

This section deals with analysis related to contextual influences of undergraduate students. Table 4.7 presents percentage-wise analysis of levels of contextual influences among undergraduate students.

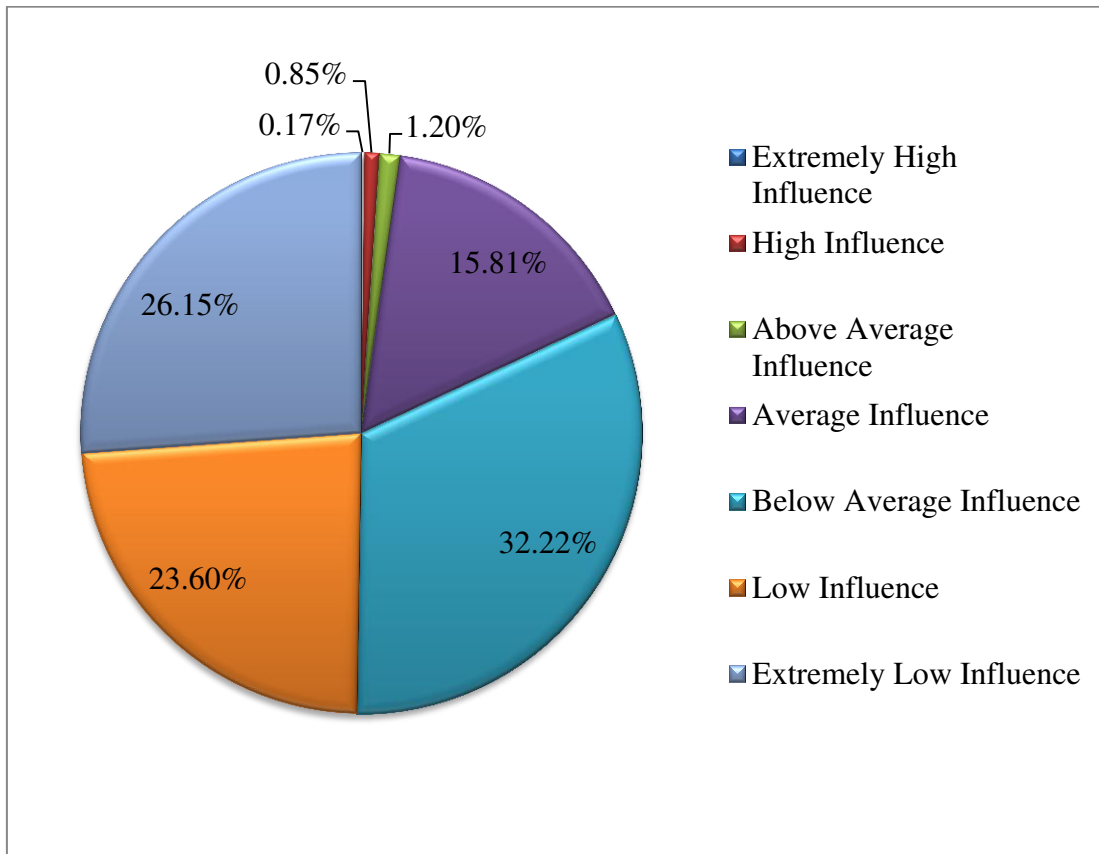
**TABLE 4.7**  
**PERCENTAGE-WISE LEVELS OF CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS**

<b>Sr.</b>	<b>LEVELS OF CONTEXTUAL INFLUENCE</b>	<b>N</b>	<b>%age</b>
01	Extremely High Influence	02	0.17
<b>02</b>	<b>High Influence</b>	<b>10</b>	<b>0.85</b>
03	Above Average Influence	14	1.20
<b>04</b>	<b>Average Influence</b>	<b>185</b>	<b>15.81</b>
05	Below Average Influence	377	32.22
<b>06</b>	<b>Low Influence</b>	<b>276</b>	<b>23.60</b>
07	Extremely Low Influence	306	26.15
<b>Total</b>		<b>1170</b>	<b>100%</b>

It is clear from Table 4.7 that 0.17% (n=02) undergraduate students possess extremely high level of contextual influence. Similarly, about 0.85% (n=10) undergraduate students possess high level of contextual influence. Further, it is obvious from Table 4.7 that 1.20% (n=14) undergraduate students possess above average level of contextual influence; 15.81% (n=185) possess average level of contextual influence; 32.22% (n=377) undergraduate students possess below average level of contextual influence; 23.60% (n=276) undergraduate students possess low level of contextual influence. In extremely below level, there are 26.15% (n=306) undergraduate students. Most of the undergraduate students possess below average level followed by extremely low, low, average, above average, high and extremely high level of contextual influence. Figure 4.7 indicates different levels of contextual influences among undergraduate students.

**FIGURE 4.7**

**GRAPHICAL REPRESENTATION OF LEVELS OF CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS**



**4.2.8. DIMENSION-WISE LEVELS OF CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS.**

This section is related to dimension-wise levels of contextual influences i.e. peer influence, parental influence and institutional climate of undergraduate students. An analysis of dimension-wise levels of contextual influences among undergraduate students is given in Table 4.8.

**TABLE 4.8**

**DIMENSION-WISE LEVELS OF CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS**



Sr.	Dimension  LEVELS 	Peer Influence		Parental Influence		Institutional Climate	
		N	%	N	%	N	%
01	Extremely High Influence	08	0.68	03	0.26	01	0.09
<b>02</b>	<b>High Influence</b>	<b>16</b>	<b>1.37</b>	<b>20</b>	<b>1.71</b>	<b>19</b>	<b>1.62</b>
03	Above Average Influence	35	2.99	23	1.96	151	12.91
<b>04</b>	<b>Average Influence</b>	<b>222</b>	<b>18.98</b>	<b>93</b>	<b>7.95</b>	<b>287</b>	<b>24.53</b>
05	Below Average Influence	285	24.36	365	31.20	212	18.12
<b>06</b>	<b>Low Influence</b>	<b>227</b>	<b>19.40</b>	<b>322</b>	<b>27.52</b>	<b>172</b>	<b>14.70</b>
07	Extremely Low Influence	377	32.22	344	29.40	328	28.03
<b>Total</b>		<b>1170</b>	<b>100</b>	<b>1170</b>	<b>100</b>	<b>1170</b>	<b>100</b>

Table 4.8 reveals that 0.68% (n=08) undergraduate students possess extremely high level of peer influence; 1.37% (n=16) undergraduate students possess high level, 2.99% (n=35) undergraduate students possess above average level, 18.98 (n=222) undergraduate students possess average level of peer influence. It may also be analyzed from Table 4.8 that 24.36% (n=285) undergraduate students possess below average level and 19.40% (n=227) undergraduate students possess low level of peer influence. Similarly, 32.22% (n=377) undergraduate students possess extremely low level of peer influence. Results suggest that about one third of undergraduate students possess extremely low level followed by below average, low, average, above average, high and extremely high level of peer influence.

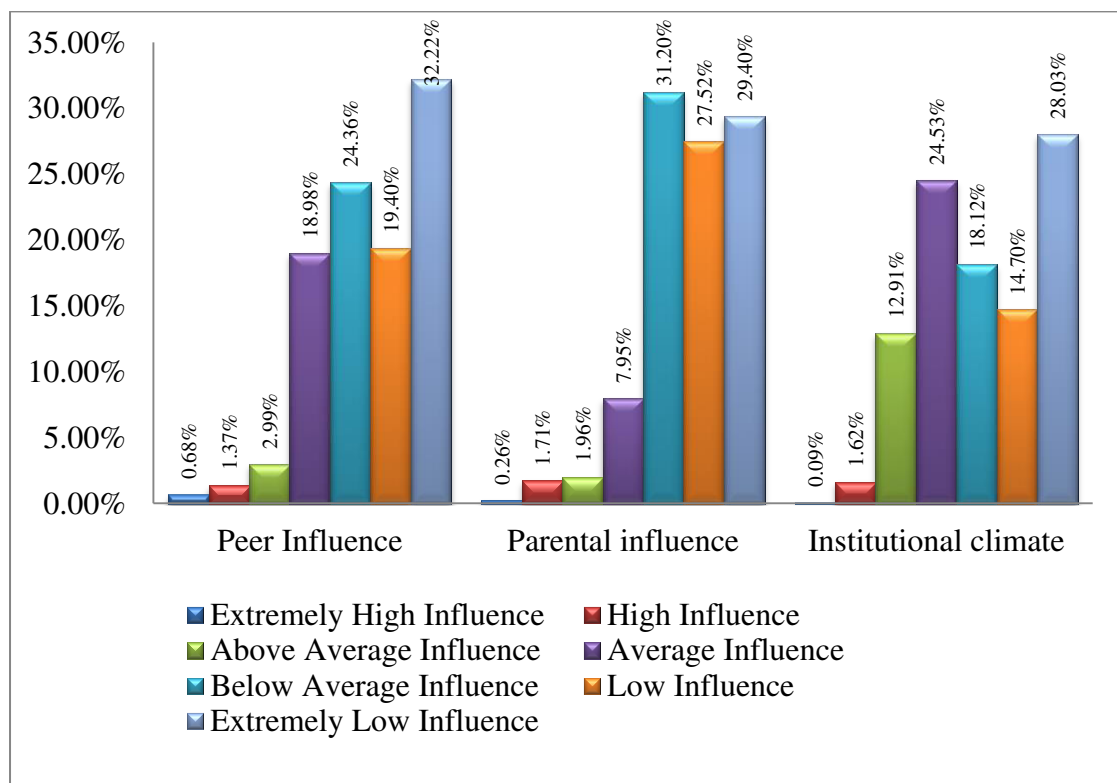
It is clear from Table 4.8 that 0.26% (n=03) undergraduate students possess extremely high level of parental influence; 1.71% (n=20) undergraduate students possess high level of parental influence, 1.96% (n=23) undergraduate students possess above average level, 7.95% (n=93) undergraduate students possess average level of parental influence. Similarly, 31.20% (n=365) undergraduate students possess below average level of parental influence. Whereas, 27.52% (n=322) undergraduate students possess low level of parental influence; 29.40% (n=344) students exhibit extremely low level of parental influence. The observation of the results suggests that about one



third of the undergraduate students possess below average level followed by extremely low, low, average, above average, high and extremely high level of parental influence.

It is further obvious from Table 4.8 that 0.09% (n=01) undergraduate students perceive extremely high level of institutional climate, 1.62% (n=19) undergraduate students perceive high level of institutional climate; 12.91% (n=151) undergraduate students perceive above average level of institutional climate; 24.53% (n=287) undergraduate students perceive average level of institutional climate; 18.12% (n=212) undergraduate students perceive below average level of institutional climate and 14.70% (n=172) undergraduate students perceive low level of institutional climate; whereas 28.03% (n=328) undergraduate students perceive extremely low level of institutional climate. The results suggest that most undergraduate students perceive extremely low institutional climate followed by average, below average, low, above average, high and extremely high respectively. Further, figure 4.8 shows graph dimension-wise levels of contextual influences among undergraduate students.

**FIGURE 4.8**  
**DIMENSION-WISE LEVELS OF CONTEXTUAL INFLUENCES AMONG UNDERGRADUATE STUDENTS**



### SECTION 3: COMPARATIVE ANALYSIS

The second objective of the study is “to find out differences in personality hardiness, anomie, contextual influences and academic dishonesty among undergraduate students on the basis of gender, age, socio-economic status and region of college campuses”. In order to examine the significant differences in mean scores of academic dishonesty, anomie, personality hardiness and contextual influences, three-way analysis of variance (ANOVA) has been applied for analysis of data. ANOVA, a statistical technique determines the statistical significance of two or more mean differences. The analysis of variables has been done using three categorical variables viz: gender, age and socio-economic status. The categorization of 2 types of gender (male and female); 2 types of age group (upto-20 and above-20 years); and 2 types of socio-economic status (Low SES and High SES) was applied. Table 4.9 presents sample distribution based on subgroups of variables in this study.

**TABLE 4.9**

**DISTRIBUTION OF SAMPLE WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS OF UNDERGRADUATE STUDENTS**

<b>VARIABLE</b>	<b>CATEGORY</b>	<b>VALUE LABEL</b>	<b>N</b>	<b>%AGE</b>
GENDER	1	MALE	594	50.8
	2	FEMALE	576	49.2
<b>TOTAL</b>			<b>1170</b>	<b>100%</b>
AGE	1	UPTO-20 Years	619	52.9
	2	ABOVE-20 Years	551	47.1
<b>TOTAL</b>			<b>1170</b>	<b>100%</b>
SES	1	LOW SES (Upto 50,000)	659	56.3
	2	HIGH SES (Above 50,000)	511	43.7
<b>TOTAL</b>			<b>1170</b>	<b>100%</b>

**NOTE: SES** = Socio-Economic Status

The demographic information (Table 4.9) of the 1170 undergraduate students is as follows: 50.80% (n=594) of the undergraduate students were male and 49.20% (n=576) were female; undergraduate students upto-age 20 years were 52.90% (n=619) and above-20 years were 47.10% (n=551). Further, it is clear from Table 4.9 that 56.30% (n=659) undergraduate students were from low socio-economic status families having income upto fifty thousand per annum and 43.70% (n=511) were

from high socio-economic status families having income above fifty thousand per annum.

#### **4.3. COMPARISON OF ACADEMIC DISHONESTY, ANOMIE, PERSONALITY HARDINESS AND CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

In order to find the significant differences in academic dishonesty, anomie, personality hardiness and contextual influences, three-way analysis of variance (2X2X2 factorial design involving 2 types of gender i.e. male and female; 2 types of age group i.e. upto-20 and above-20 years; and 2 types of socio-economic status i.e. low socio-economic status and high socio-economic status) was applied. The data relating to academic dishonesty, anomie, personality hardiness and contextual influences have been analyzed using univariate analysis of variance and comprehensive details are presented as follows:

##### **4.3.1. SUMMARY OF 2X2X2 ANALYSIS OF VARIANCE (ANOVA) OF ACADEMIC DISHONESTY AMONG UNDERGRADUATE STUDENTS WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

To study the academic dishonesty of male and female undergraduate students from two age groups having low and high socio-economic status, descriptive statistics were calculated for different dimensions and the total score of academic dishonesty and are presented below in the Table 4.10.

**TABLE 4.10**  
**DESCRIPTIVE STATISTICS OF ACADEMIC DISHONESTY WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>G</b>	<b>Age</b>	<b>SES</b>		<b>CE</b>	<b>PL</b>	<b>OH</b>	<b>PC</b>	<b>FF</b>	<b>LY</b>	<b>TAD</b>				
<b>M</b>	<b>A</b>	<b>L</b>	<b>E</b>	Upto-20	Low SES	M=	12.67	11.08	11.01	8.66	8.00	11.23	62.64	
						N= 213	SD=	3.094	2.554	1.713	1.775	1.946	2.103	7.498
					High SES	M=	12.66	10.62	11.15	8.57	7.95	10.99	61.94	
						N= 165	SD=	3.334	2.534	1.650	1.761	1.906	2.443	9.137
					TOTAL	M=	12.66	10.88	11.07	8.62	7.98	11.12	62.33	
						N= 378	SD=	3.197	2.552	1.685	1.767	1.926	2.257	8.249
<b>M</b>	<b>A</b>	<b>L</b>	<b>E</b>	Above-20	Low SES	M=	10.62	8.94	9.88	7.72	7.30	10.18	54.63	
						N= 117	SD=	3.557	3.077	2.461	2.108	1.890	2.842	10.90
					High SES	M=	10.15	9.10	9.98	7.26	6.95	9.26	52.71	
						N= 99	SD=	3.376	3.092	2.095	2.150	1.815	2.617	9.812

F E M A L E	Total	TOTAL	M=	10.40	9.01	9.93	7.51	7.14	9.76	53.75
		N= 216	SD=	3.475	3.078	2.295	2.135	1.860	2.773	10.43
		Low SES	M=	11.94	10.32	10.61	8.32	7.75	10.85	59.80
		N=330	SD=	3.405	2.932	2.078	1.949	1.952	2.439	9.637
		High SES	M=	11.72	10.05	10.71	8.08	7.58	10.34	58.48
		N=264	SD=	3.558	2.847	1.911	2.015	1.931	2.642	10.39
	Upto-20	TOTAL	M=	11.84	10.20	10.65	8.22	7.67	10.63	59.21
		N=594	SD=	3.473	2.896	2.004	1.981	1.943	2.542	9.993
		Low SES	M=	11.98	9.81	10.69	8.01	7.51	10.10	58.10
		N= 143	SD=	3.318	2.948	2.078	2.076	2.185	2.528	10.21
		High SES	M=	11.61	9.35	10.14	7.68	7.24	9.87	55.90
		N= 98	SD=	3.363	3.130	2.081	2.123	2.046	2.764	10.78
Above-20	TOTAL	M=	11.83	9.62	10.46	7.88	7.40	10.01	57.21	
	N= 241	SD=	3.334	3.025	2.019	2.097	2.129	2.624	10.48	
	Low SES	M=	10.63	8.20	9.25	7.15	6.67	8.91	50.81	
	N= 186	SD=	3.334	2.954	2.460	2.185	1.947	2.855	10.40	
	High SES	M=	9.79	7.72	8.91	6.48	6.16	8.37	47.43	
	N= 149	SD=	3.270	2.643	2.416	1.891	1.748	2.510	9.288	
Total	TOTAL	M=	10.26	7.99	9.10	6.85	6.44	8.67	49.31	
	N= 335	SD=	3.461	2.826	2.442	2.083	1.875	2.716	10.04	
	Low SES	M=	11.22	8.90	9.88	7.52	7.04	9.43	53.98	
	N=329	SD=	3.523	3.053	2.359	2.178	2.092	2.778	10.92	
	High SES	M=	10.51	8.36	9.40	6.96	6.59	8.96	50.79	
	N=247	SD=	3.419	2.950	2.363	2.068	1.942	2.710	10.72	
T O T A L	Upto-20	TOTAL	M=	10.91	8.67	9.67	7.28	6.85	9.23	52.61
		N=576	SD=	3.493	3.018	2.370	2.148	2.039	2.756	10.94
		Low SES	M=	12.39	10.57	10.88	8.40	7.80	10.78	60.82
		N=356	SD=	3.199	2.786	1.817	1.925	2.056	2.345	8.958
		High SES	M=	12.27	10.14	10.77	8.24	7.69	10.57	59.69
		N=263	SD=	3.377	2.833	1.882	1.948	1.985	2.620	10.19
	Above-20	TOTAL	M=	12.34	10.39	10.83	8.33	7.75	10.69	60.34
		N=619	SD=	3.274	2.812	1.844	1.935	2.025	2.465	9.510
		Low SES	M=	10.62	8.49	9.50	7.37	6.91	9.40	52.29
		N=303	SD=	3.561	3.019	2.475	2.031	1.946	2.912	10.74
		High SES	M=	9.94	8.27	9.34	7.11	6.48	8.73	49.54
		N=248	SD=	3.310	2.905	2.348	2.126	1.813	2.586	9.828
Total	TOTAL	M=	10.31	8.39	9.42	7.92	6.72	9.10	51.05	
	N=551	SD=	3.464	2.967	2.418	2.104	1.898	2.788	10.42	
	Low SES	M=	11.58	9.61	10.24	7.92	7.39	10.14	56.90	
	N=659	SD=	3.481	3.074	2.251	2.104	2.053	2.707	10.69	
	High SES	M=	11.14	9.23	10.08	7.54	7.10	9.68	54.76	
	N=511	SD=	3.540	3.015	2.237	2.115	1.996	2.760	11.22	
Total	TOTAL	M=	11.39	9.45	10.17	7.75	7.26	9.94	55.76	
	N=1170	SD=	3.512	3.053	2.246	2.116	2.033	2.739	10.97	

**NOTE:** G=Gender, SES=Socio-economic status, CE=Cheating in Examination, PL=Plagiarism, OH=Outside Help, PC=Prior Cheating, FF=Falsification, LY=Lying About Academic Assignments, TAD= Total Academic Dishonesty

In order to analyze the academic dishonesty of the male and female undergraduate students having two age groups i.e. upto-20 and above-20 years from low and high socio-economic status, obtained scores were subjected to ANOVA and the comprehensive details of the results is displayed in the Table 4.11.

**TABLE 4.11**  
**SUMMARY OF 2X2X2 ANOVA OF ACADEMIC DISHONESTY IN**  
**RELATION TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>Variables</b>	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Cheating in Examination</b>	<b>Gender</b>	1	73.855	73.855	6.581	.010
	<b>Age</b>	1	1018.314	1018.314	90.736	.000
	<b>SES</b>	1	47.737	47.737	4.254	.039
	<b>G*A</b>	1	32.925	32.925	2.934	.087
	<b>G*S</b>	1	9.178	9.178	.818	.366
	<b>A*S</b>	1	14.678	14.678	1.308	.253
	<b>G*A*S</b>	1	.003	.003	.000	.988
	<b>Error</b>	1162	13040.903	11.223		
<b>Total</b>	1170	166085.000				
<b>Plagiarism</b>	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
	<b>Gender</b>	1	370.543	370.543	46.281	.000
	<b>Age</b>	1	810.580	810.580	101.241	.000
	<b>SES</b>	1	26.876	26.876	3.357	.067
	<b>G*A</b>	1	3.089	3.089	.386	.535
	<b>G*S</b>	1	7.087	7.087	.885	.347
	<b>A*S</b>	1	6.242	6.242	.780	.377
	<b>G*A*S</b>	1	7.179	7.179	.897	.344
<b>Error</b>	1162	9303.499	8.006			
<b>Total</b>	1170	115351.000				
<b>Outside Help</b>	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
	<b>Gender</b>	1	155.545	155.545	35.133	.000
	<b>Age</b>	1	418.758	418.758	94.584	.000
	<b>SES</b>	1	7.130	7.130	1.610	.205
	<b>G*A</b>	1	2.308	2.308	.521	.470
	<b>G*S</b>	1	21.294	21.294	4.810	.028
	<b>A*S</b>	1	.469	.469	.106	.745
	<b>G*A*S</b>	1	.974	.974	.220	.639
<b>Error</b>	1162	5144.603	4.427			
<b>Total</b>	1170	126909.000				
<b>Prior Cheating</b>	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
	<b>Gender</b>	1	142.137	142.137	35.853	.000
	<b>Age</b>	1	318.343	318.343	80.299	.000
	<b>SES</b>	1	40.508	40.508	10.218	.001

	<b>G*A</b>	1	.495	.495	.125	.724
	<b>G*S</b>	1	3.544	3.544	.894	.345
	<b>A*S</b>	1	8.495	8.495	2.143	.144
	<b>G*A*S</b>	1	.015	.015	.004	.951
	<b>Error</b>	1162	4606.708	3.964		
	<b>Total</b>	1170	75595.000			
	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Falsification</b>	<b>Gender</b>	1	115.802	115.802	30.772	.000
	<b>Age</b>	1	223.344	223.344	59.349	.000
	<b>SES</b>	1	23.325	23.325	6.198	.013
	<b>G*A</b>	1	.856	.856	.227	.634
	<b>G*S</b>	1	2.501	2.501	.665	.415
	<b>A*S</b>	1	5.178	5.178	1.376	.241
	<b>G*A*S</b>	1	.062	.062	.017	.898
	<b>Error</b>	1162	4372.870	3.763		
	<b>Total</b>	1170	66582.000			
	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Lying about Academic Dishonesty</b>	<b>Gender</b>	1	331.595	331.595	50.610	.000
	<b>Age</b>	1	510.142	510.142	77.861	.000
	<b>SES</b>	1	63.160	63.160	9.640	.002
	<b>G*A</b>	1	.116	.116	.018	.894
	<b>G*S</b>	1	2.348	2.348	.358	.549
	<b>A*S</b>	1	16.612	16.612	2.535	.112
	<b>G*A*S</b>	1	2.506	2.506	.383	.536
	<b>Error</b>	1162	7613.426	6.552		
	<b>Total</b>	1170	124355.000			
	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Total Academic Dishonesty</b>	<b>Gender</b>	1	6594.771	6594.771	71.149	.000
	<b>Age</b>	1	18555.475	18555.475	200.189	.000
	<b>SES</b>	1	1149.558	1149.558	12.402	.000
	<b>G*A</b>	1	37.164	37.164	.401	.527
	<b>G*S</b>	1	149.767	149.767	1.616	.204
	<b>A*S</b>	1	98.282	98.282	1.060	.303
	<b>G*A*S</b>	1	.044	.044	.000	.983
	<b>Error</b>	1162	107705.590	92.690		
	<b>Total</b>	1170	3805095.000			

**NOTE:** G=Gender, A=Age, S=Socio-economic status, **SS**=Sum of Squares, **MS**=Mean Square

**F-value** at (1, 1162 df= 3.85 at 0.05 level and 6.66 at 0.01 level)

## **MAIN EFFECTS**

### **GENDER**

An inspection of the Table 4.11 revealed that the F-ratio of the gender difference on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty of male and female undergraduate students has been found to be (6.581,  $p < 0.05$ ), (46.281,  $p < 0.01$ ), (35.133,  $p < 0.01$ ), (35.853,  $p < 0.01$ ), (30.772,  $p < 0.01$ ), (50.610,  $p < 0.01$ ), and (71.149,  $p < 0.01$ ) respectively. The results indicate that undergraduate male and female students differ significantly on the scores of cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Therefore, the data provides sufficient evidence to reject the hypothesis 1(a) "There exists no significant difference between male and female undergraduate students in their academic dishonesty". Meaning thereby undergraduate male and female students differ significantly in their involvement in the academically dishonest practices.

Referring to Table 4.10, it was found that mean score of male undergraduate students is greater as compared to their female counterparts on cheating in examination (Male=11.84, Female=10.91), plagiarism (Male=10.20, Female=8.67), outside help (Male=10.65, Female=9.67), prior cheating (Male=8.22, Female=7.28), falsification (Male=7.67, Female=6.85), lying about academic assignments (Male=10.63, Female=9.23) and total academic dishonesty (Male=59.21, Female=52.61). The observation of the results suggest that male students are more involved in dishonest academic practices as compared to their female counterparts in all dimensions and total academic dishonesty. Perhaps, male undergraduate students are more goal ambitious and are looking to achieve things quicker to gain more achievement. In other words, male students feel pressure to strive and flourish in competitive examination or getting admission in top institutions (Taylor et al., 2003).

### **AGE**

It is clear from the Table 4.11 that F-ratio for differences in cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty of undergraduate students of two age groups i.e. upto-20 and above-20 years, came out to be (90.736,  $p < 0.01$ ),

(101.241,  $p < 0.01$ ), (94.584,  $p < 0.01$ ), (80.299,  $p < 0.01$ ), (59.349,  $p < 0.01$ ), (77.861,  $p < 0.01$ ), and (200.189,  $p < 0.01$ ). This indicates that the two groups of undergraduate students differ significantly on their scores of all dimensions and total academic dishonesty. Thus, the data provides sufficient evidence to reject the hypothesis 1(b) “There exists no significant difference in academic dishonesty of undergraduate students on the basis of age”. The observation of the results suggests that younger (upto-20 years) and an older (above-20 years) undergraduate students significantly differ in their dishonest academic practices.

It is clear from Table 4.10 that undergraduate students having age group upto-20 years had more mean score on cheating in examination (Up to 20 years=12.34; Above 20 Years=10.31), plagiarism (Up to 20 years = 10.39; Above 20 Years=8.39), outside help (Up to 20 years = 10.83; Above 20 Years=9.42), prior cheating (Up to 20 years = 8.33; Above 20 Years=7.92), falsification (Up to 20 years = 7.75; Above 20 Years = 6.72), lying about academic assignments (Up to 20 years = 10.69; Above 20 Years = 9.10), and total academic dishonesty (Up to 20 years = 60.34; Above 20 Years=51.05 ) as compared to their above-20 years undergraduate students. Meaning thereby upto-20 years age group of undergraduate students are more engaged in academic dishonest practices as compared to their above-20 year counterparts.

## **SOCIO-ECONOMIC STATUS**

It is evident from the Table 4.11 that the F-ratio for the differences in cheating in examination (F-ratio = 4.254,  $p < 0.05$ ), plagiarism (F-ratio = 3.357,  $p > 0.05$ ), outside help (F-ratio = 1.160,  $p > 0.05$ ), prior cheating (F-ratio = 10.218,  $p < 0.01$ ), falsification (F-ratio = 6.198,  $p < 0.05$ ), lying about academic assignments (F-ratio = 9.640,  $p < 0.01$ ) and total academic dishonesty (F-ratio = 12.402,  $p < 0.01$ ) of undergraduate students, is significant. This indicates that undergraduate students from low and high socio-economic status differ significantly in their scores of cheating in examination, prior cheating, falsification, lying about academic assignments and total score of academic dishonesty. Thus, the data provides sufficient evidence to reject the hypothesis 1(c) “There exists no significant difference between undergraduate students from low and high socio-economic status in their academic dishonesty” for cheating in examination, prior cheating, falsification, lying about academic assignments and total academic dishonesty. The observation of the results suggests that there is a significant



difference between low and high socio-economic status of undergraduate students in their academic dishonesty.

Referring to Table 4.10, it was found that undergraduate students from low socio-economic status had more mean score on cheating in examination (Low SES=11.58; High SES=11.14), prior cheating (Low SES=7.92; High SES=7.54), falsification (Low SES=7.39; High SES=7.10), lying about academic assignments (Low SES=10.14; High SES=9.68), and total academic dishonesty (Low SES=56.90; High SES=54.76) as compared to their high socio-economic status counterparts. Therefore, it was concluded that undergraduate students coming from low socio-economic status families are more involved in academically dishonest practices as compared to students from high socio-economic status families.

## **INTERACTION EFFECTS**

### **Gender X Age**

It is obvious from the Table 4.11 that the F-ratios for the interaction between gender and age of the undergraduate students on the scores of cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total score of academic dishonesty has been found to be 2.934, .386, .521, .125, .227, .018 and .401 respectively, which were found to be insignificant even at the 0.05 level of confidence. This indicates that the two groups of undergraduate students as a result of interaction of gender and age do not differ significantly in their scores of 'cheating in examination', 'plagiarism', 'outside help', 'prior cheating', 'falsification', 'lying about academic assignments', and total scores of academic dishonesty. Thus, the data does not provide sufficient evidence to reject the hypothesis 1(d) "There is no significant interaction effect of gender and age on academic dishonesty of undergraduate students" for 'cheating in examination', 'plagiarism', 'outside help', 'prior cheating', 'falsification', 'lying about academic assignments', and total scores of academic dishonesty. Meaning thereby undergraduate male and female students from two age groups i.e. upto-20 and above-20 years are same in their academic dishonesty. There is no significant interaction effect of gender and age on the academic dishonesty of undergraduate students.

## **Gender X Socio-economic Status**

Table 4.11 revealed that the F-ratio for the interaction between gender and socio-economic status of undergraduate students on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty has been found to be .818, .885, (4.810,  $p < 0.5$ ), .894, .665, .358, and 1.616 respectively, which were found insignificant even at 0.05 level of confidence except outside help dimension, which was found significant at 0.05 level of confidence. The result indicates that the main effects i.e. gender and socio-economic status functions independently. Therefore, the data does not provide sufficient evidence to reject the hypothesis 1(e) “There is no significant interaction effect of gender and socio-economic status on academic dishonesty of undergraduate students” for ‘cheating in examination’, ‘plagiarism’, ‘prior cheating’, ‘falsification’, ‘lying about academic assignments’, and total scores of academic dishonesty. The results showed that male and female students from low and high socio-economic status are same in their academic dishonesty. There is no significant interaction effect of gender and socio-economic status on their academic dishonesty.

However, F-ratio for interaction effect of gender and socio-economic status on dimension ‘outside help’ has been found significant at 0.05 level of confidence. To analyze the significant difference between various groups; t-test was applied on ‘outside help’ dimension of academic dishonesty and obtained results are displayed in the Table 4.12.

**TABLE 4.12**  
**SUMMARY OF ‘t’-VALUES FOR THE SUB GROUPS IN RESPECT OF**  
**‘OUTSIDE HELP’ DIMENSION OF ACADEMIC DISHONESTY**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 10.61 SD= 2.078 N= 330	Females from Low SES	M= 9.88 SD= 2.359 N= 329	4.294**
Males from Low SES	M= 10.61 SD= 2.078 N= 330	Females from High SES	M= 9.40 SD= 2.363 N= 247	6.405**
Males from Low SES	M= 10.61 SD= 2.078 N= 330	Males from High SES	M= 10.71 SD= 1.911 N= 264	0.604
Females from Low SES	M= 9.88 SD= 2.359 N= 329	Females from High SES	M= 9.40 SD= 2.363 N= 247	2.415*
Males from High SES	M= 10.71 SD= 1.911 N= 264	Females from High SES	M= 9.40 SD= 2.363 N= 247	6.863**
Males from High SES	M= 10.71 SD= 1.911 N= 264	Females from Low SES	M= 9.88 SD= 2.359 N= 329	4.733**

\*\*/\* Significant at 0.01 & 0.05 level of confidence

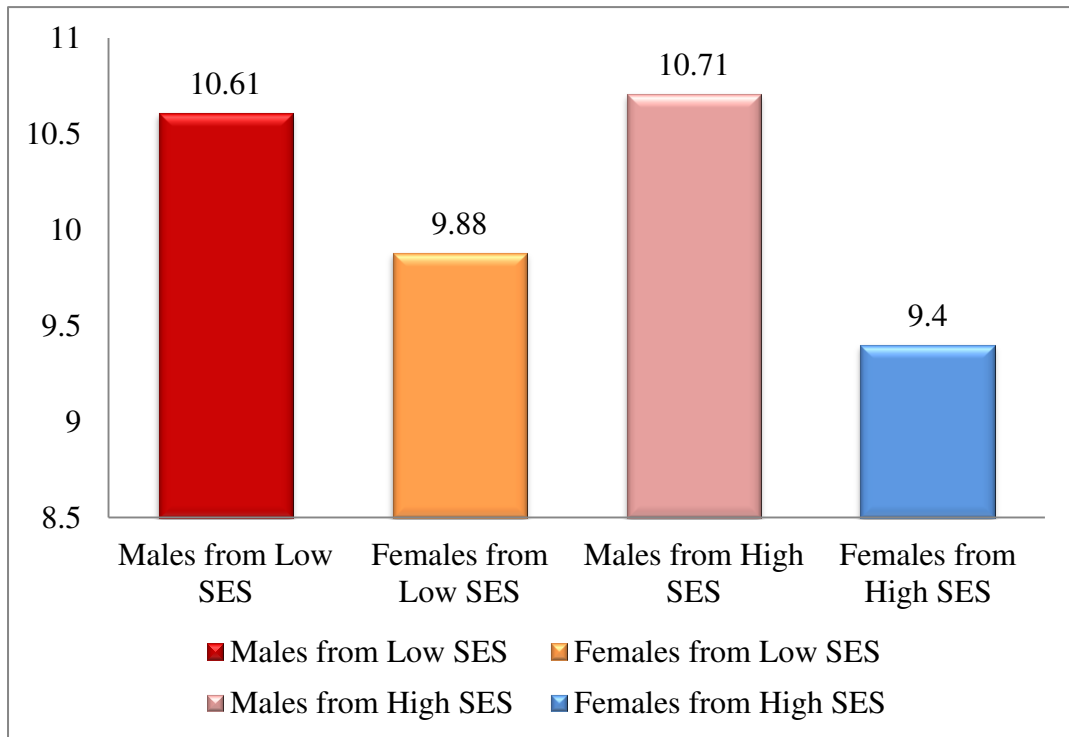
Table 4.12 indicated that the t-value for 5 sub-groups was found to be significant at 0.01 or 0.05 level of confidence. From Table 4.12, it is clear that males from low SES (Mean=10.61) have greater mean score than females from low SES (Mean=9.88) and females from high SES (Mean=9.40) on ‘outside help’ dimension of academic dishonesty. Meaning thereby male undergraduate students who have low SES are more engaged in academically dishonest practices than females from low and high SES.

Further is clear from Table 4.10, that female undergraduate students from low SES (Mean=9.88) have greater mean score than female undergraduate students from high SES (Mean=9.40) on ‘outside help’ dimension of academic dishonesty. Moreover, male undergraduate students from high SES (Mean=10.71) have higher mean score than female undergraduate students from high SES (Mean=9.40) and female undergraduate students from low SES (Mean=9.88). Meaning thereby, male undergraduate students from high SES are more engaged in outside help as compared to female undergraduate students from high and low SES. Further, Figure 4.9 shows

mean scores of undergraduate students in ‘outside help’ dimension of academic dishonesty.

**FIGURE 4.9**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN ‘OUTSIDE HELP’  
DIMENSION OF ACADEMIC DISHONESTY**



**Age X Socio-economic Status**

Table 4.11 revealed that the F-ratio for the interaction between age and socio-economic status of undergraduate students on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty has been found to be 1.308, .780, .106, 2.143, 1.376, 2.535, and 1.060 respectively. All f-ratios were found to be insignificant even at 0.05 level of confidence. Therefore, the data does not provide sufficient evidence to reject the hypothesis 1(f) there is no significant interaction effect of age and socio-economic status on academic dishonesty of undergraduate students”. It may be interpreted that the involvement of undergraduate students in academic dishonesty as a result of interaction between age and socio-economic status for various sub-groups do not differ significantly on ‘cheating in examination’, ‘plagiarism’, ‘outside help’, ‘prior

cheating', 'falsification', 'lying about academic assignments', and total scores of academic dishonesty.

### **THREE ORDER INTERACTION**

#### **Gender X Age X Socio-economic Status**

Table 4.11 displays that the F-ratios for the interaction between gender, age and socio-economic status for cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty; which were found to be .000, .897, .220, .004, .017, .383 and .000 respectively, which are not found to be significant even at the 0.05 level of confidence. This indicates that undergraduate students do not differ in 'cheating in examination', 'plagiarism', 'outside help', 'prior cheating', 'falsification', 'lying about academic assignments', and total academic dishonesty as a result of interaction effect of gender, age and socio-economic status. Thus, the data does not provide adequate evidence to reject the hypothesis 1(g) "There is no significant interaction effect of gender, age and socio-economic status on the academic dishonesty among undergraduate students". Meaning thereby sub-groups of undergraduate students as a result of interaction of gender, age and socio-economic status do not differ significantly in academic dishonesty.

### **DISCUSSION ON RESULTS**

The results from the present study revealed that gender, age and socio-economic status significantly influence the dishonest academic practices among undergraduate students. It was found that there is a significant difference between male and female undergraduate students on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty. The results suggest that male undergraduate students are more engaged in dishonest academically behaviors as compared to their female counterparts. Examination of findings suggests a number of diverse explanations. For instance, it may be due to poor learning environment of male students or it may be the fault of a syllabus that does not teach ethical and moral principles (Austin & Brown, 1999; Underwood & Szabo, 2004). The other reason may be undergraduate male students with lack of preparation could not achieve as well as those who prepare well (Obe, 2005). For this reason, male students are more probable to develop anxiety of

being called as a failure (Murdock et al., 2001). To diminish this anxiety by keeping up good marks, male students opt for academic dishonesty in college campus. Moreover, gender difference may be attributed to the huge demand positioned on the male gender in the link of social upward mobility. As a result, they involve in all practices of shortcuts to meet the social expectation (Murdock & Anderman, 2007). However, students who should not have flourished, as desperate as they seem have become, involve in dishonest academic activities in order to flourish (Fawkner & Keremidchieva, 2004).

This finding is also coherent with the results of other researchers (Honny et al., 2010; Ghanem & Mozahem, 2019; Kobayashi & Fukushima, 2012; Saulsbury et al., 2011; Zhang, Paulhus, & Ziegler, 2018; Zhang, Yin, & Zheng, 2017), stating that male undergraduate students, probably because they do not create such resilient ties with their societal rules and environment as undergraduate females do, are more regularly engaged in dishonest academic practices. Likewise, male's involvement in academic dishonesty may be elucidated by the gender role conflict that arises when males are socialized into the traditional roles of masculinity, reinforced by expectations of achievement manifested as persistent worries about own accomplishment, competence, failure and occupational achievement (Cournoyer & Mahalik 1995; O'Neil et al., 1995). On the other hand, investigators failed to reveal any gender differences (Baird, 1980; Haines, Diekhoff, LaBeff, & Clark, 1986; Whitley, Nelson, & Jones, 1999). Moreover, Zhang, Yin, & Zheng (2017) found that female participants had more moral attitude and more negative attitudes towards academic dishonesty and reported less academically dishonest behavior than males.

Apart from gender, age has also been studied in relation to academic dishonesty of undergraduate students. An analysis of the results indicated significant difference in cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty between younger i.e. upto-20 years and an older i.e. above-20 years undergraduate students. The younger students obtained significantly higher academic dishonesty scores as compared to their older counterparts. However, similar to gender differences, this finding is consistent with the majority of studies that indicate immature, younger students cheat more than older and mature students (Haines et al., 1986; Klein, Levenburg, McKendall, & Mothershell, 2007; Lin & Wen, 2007).

Nonetheless, Haines et al. (1986) exposed that older students are less likely to involve in dishonest academic practices than younger undergraduate students because older students are more mature (in terms of personality and age) are usually categorized by a presence of commitment.

In addition, empirical verification suggests that two groups of socio-economic status differ significantly in academic dishonesty. Low SES undergraduate students are more involved in dishonest academic practices. This result is consistent with Pearline (2007); Nzoka (2007); Ukpore (2005), confirmed that students from low socio-economic status cheat more than students from high socio-economic status. The findings of the study also indicated that parents of the low socio-economic status have higher aspirations or expectations for their children than parents of the high socio-economic status; it may result in misconduct during examination. The explanations being that, children from low socio-economic status have less access to educational facilities/materials than high socio-economic status (Ukpore, 2005). On the contrary, Aduloju and Obinne (2013) found that socio-economic status had no significant effect on students' dishonest academic behavior.

The two order interaction effect between gender and age and gender and socio-economic status are found to be insignificant for cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments, and total academic dishonesty of undergraduate students. This result is consistent with Eze (2010), who found insignificant interaction effect on academic dishonesty. However, interaction effect of gender and socio-economic status is found significant for 'outside help' dimension of academic dishonesty which means that male and female students who are from low and high SES families vary in their 'outside help' dimension of academic dishonesty. It implies that with the interaction of age and socio-economic status lead towards examination malpractices among undergraduate students. To conclude, gender, age and socio-economic status significantly influence on academic dishonesty of undergraduate students. However, two-order and three-order interaction effects didn't influence on student performance of dishonest academic acts except 'outside help' dimension of academic dishonesty.

**4.3.2. SUMMARY OF 2X2X2 ANALYSIS OF VARIANCE (ANOVA) OF ANOMIE AMONG UNDERGRADUATE STUDENTS WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

To study the anomie of male and female undergraduate students from two age groups having low and high socio-economic status, descriptive statistics was calculated for meaningfulness, distrust, moral decline and the total score of anomie and are presented in the Table 4.13.

**TABLE 4.13  
DESCRIPTIVE STATISTICS OF ANOMIE WITH RESPECT TO GENDER,  
AGE AND SOCIO-ECONOMIC STATUS**

<b>G</b>	<b>Age</b>	<b>SES</b>		<b>ML</b>	<b>DT</b>	<b>MD</b>	<b>TA</b>	
<b>Male</b>	<b>Upto-20</b>	Low SES	M=	26.01	25.91	16.35	68.70	
			N= 213	SD=	4.90	5.02	3.383	10.10
		High SES	M=	26.09	26.03	15.78	67.90	
			N= 165	SD=	5.20	5.33	3.361	10.22
		TOTAL	M=	26.05	25.96	16.10	68.35	
			N= 378	SD=	5.033	5.15	3.381	10.14
	<b>Above-20</b>	Low SES	M=	25.67	26.46	15.11	67.24	
			N= 117	SD=	4.175	4.68	3.208	8.250
		High SES	M=	25.68	25.77	15.56	67.00	
			N= 99	SD=	4.316	5.330	3.239	9.260
		TOTAL	M=	25.67	26.14	15.31	67.13	
			N= 216	SD=	4.230	4.991	3.222	8.708
	<b>Total</b>	Low SES	M=	25.89	26.10	15.91	68.18	
			N=330	SD=	4.658	4.905	3.370	9.498
		High SES	M=	25.94	25.93	15.70	67.56	
			N=264	SD=	4.886	5.322	3.311	9.865
		TOTAL	M=	25.91	26.03	15.82	67.91	
			N=594	SD=	4.757	5.091	3.343	9.659
<b>Female</b>	<b>Upto-20</b>	Low SES	M=	28.45	27.50	17.20	73.40	
			N= 143	SD=	4.744	5.456	3.509	10.18
		High SES	M=	27.08	27.92	16.33	71.33	
			N= 98	SD=	5.301	3.976	3.348	9.062
		TOTAL	M=	27.90	27.67	16.84	72.56	
			N= 241	SD=	5.013	4.904	3.464	9.779
	<b>Above-20</b>	Low SES	M=	26.72	26.98	15.74	69.43	
			N= 186	SD=	5.366	4.945	3.505	10.18
		High SES	M=	24.93	25.34	15.28	65.54	
			N= 149	SD=	4.806	5.334	3.320	9.728
		TOTAL	M=	25.92	26.25	15.53	67.70	
			N= 335	SD=	5.194	5.179	3.426	10.15
<b>Total</b>	Low SES	M=	27.47	27.21	16.37	71.16		
		N=329	SD=	5.170	5.172	3.575	10.35	



<b>Total</b>		High SES	M=	25.78	26.36	15.69	67.84
		N=247	SD=	5.108	4.995	3.364	9.866
		TOTAL	M=	26.75	26.85	16.08	69.73
		N=576	SD=	5.207	5.109	3.500	10.27
	Upto-20	Low SES	M=	26.99	26.55	16.69	70.59
		N=356	SD=	4.982	5.251	3.454	10.38
		High SES	M=	26.46	26.73	15.98	69.18
		N=263	SD=	5.252	4.948	3.360	9.928
	Above-20	TOTAL	M=	26.77	26.63	16.39	69.99
		N=619	SD=	5.101	5.121	3.430	10.20
		Low SES	M=	26.31	26.78	15.50	68.58
		N=303	SD=	4.959	4.845	3.401	9.530
	Total	High SES	M=	25.23	25.51	15.39	66.13
		N=248	SD=	4.622	5.326	3.285	9.552
		TOTAL	M=	25.82	26.21	15.45	67.48
		N=551	SD=	4.836	5.102	3.347	9.610
Total	Low SES	M=	26.68	26.65	16.14	69.67	
	N=659	SD=	4.980	5.066	3.479	10.04	
	High SES	M=	25.86	26.14	15.69	67.70	
	N=511	SD=	4.990	5.166	3.334	9.857	
	TOTAL	M=	26.32	26.43	15.95	68.81	
	N=1170	SD=	4.999	5.114	3.422	10.00	

**NOTE: G=Gender, SES=Socio-economic status, ML=Meaninglessness, DT= Distrust, MD= Moral Decline TA= Total Anomie**

In order to analyze the variance of meaninglessness, distrust, moral decline and total score of anomie of the male and female undergraduate students from two age groups having low and high socio-economic status, the obtained scores were subjected to ANOVA and the comprehensive details of the results were displayed in the Table 4.14.

**TABLE 4.14**  
**SUMMARY OF 2X2X2 ANOVA OF ANOMIE IN RELATION TO GENDER,**  
**AGE AND SOCIO-ECONOMIC STATUS**

<b>Variables</b>	<b>Source</b>	<b>DF</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Meaninglessness</b>	<b>Gender</b>	1	236.934	236.934	9.811	.002
	<b>Age</b>	1	369.462	369.462	15.299	.000
	<b>SES</b>	1	161.102	161.102	6.671	.010
	<b>G*A</b>	1	167.293	167.293	6.928	.009
	<b>G*S</b>	1	179.834	179.834	7.447	.006
	<b>A*S</b>	1	3.970	3.970	.164	.685
	<b>G*A*S</b>	1	2.078	2.078	.086	.769
	<b>Error</b>	1162	28061.138	24.149		
	<b>Total</b>	1170	839853.000			

	Source	DF	SS	MS	F	Sig.
<b>Distrust</b>	<b>Gender</b>	1	218.017	218.017	8.492	.004
	<b>Age</b>	1	134.378	134.378	5.234	.022
	<b>SES</b>	1	54.656	54.656	2.129	.145
	<b>G*A</b>	1	196.266	196.266	7.645	.006
	<b>G*S</b>	1	7.236	7.236	.282	.596
	<b>A*S</b>	1	140.266	140.266	5.464	.020
	<b>G*A*S</b>	1	25.905	25.905	1.009	.315
	<b>Error</b>	1162	29832.257	25.673		
	<b>Total</b>	1170	847867.000			
<b>Moral Decline</b>	<b>Gender</b>	1	51.201	51.201	4.493	.034
	<b>Age</b>	1	269.619	269.619	23.662	.000
	<b>SES</b>	1	36.148	36.148	3.172	.075
	<b>G*A</b>	1	18.548	18.548	1.628	.202
	<b>G*S</b>	1	24.734	24.734	2.171	.141
	<b>A*S</b>	1	34.485	34.485	3.026	.082
	<b>G*A*S</b>	1	6.275	6.275	.551	.458
	<b>Error</b>	1162	13240.615	11.395		
	<b>Total</b>	1170	311197.000			
<b>Total Anomie</b>	<b>Gender</b>	1	1336.658	1336.658	13.998	.000
	<b>Age</b>	1	2500.747	2500.747	26.189	.000
	<b>SES</b>	1	833.577	833.577	8.730	.003
	<b>G*A</b>	1	930.080	930.080	9.740	.002
	<b>G*S</b>	1	412.916	412.916	4.324	.038
	<b>A*S</b>	1	26.933	26.933	.282	.595
	<b>G*A*S</b>	1	95.836	95.836	1.004	.317
	<b>Error</b>	1162	110958.906	95.490		
	<b>Total</b>	1170	5656091.000			

**NOTE:** G=Gender, A=Age, S=Socio-economic status, SS=Sum of Squares, MS=Mean Square

F-value (1, 1162) df= 3.85 at 0.05 level and 6.66 at 0.01 level

## MAIN EFFECTS

### GENDER

It is clear from Table 4.14 that the F-ratio for the differences in meaningfulness, distrust, moral decline dimensions and total anomie of male and female undergraduate students was found to be (9.811,  $p < 0.01$ ), (8.492,  $p < 0.01$ ), (4.493,  $p < 0.05$ ) and (13.998,  $p < 0.01$ ). The results indicate that undergraduate male students and female students differ significantly in meaningfulness, distrust, moral

decline and total anomie. Therefore, the data provides sufficient evidence to reject hypothesis 2(a) “There exists no significant difference between male and female undergraduate students in their anomie”. Meaning thereby undergraduate male and female students have different perception of anomie.

It is obvious from Table 4.13 that mean score of female undergraduate students (Mean=26.75) is greater than mean score (Mean=25.91) of their male undergraduate counterparts in ‘meaninglessness’ dimension of anomie. In distrust dimension, female students perceive more lack of trust (Mean = 26.85) as compared to male students (Mean = 26.03). In moral decline, female students score more (Mean = 16.08) as compared to their male counterparts (Mean = 15.82). Also, female students score more on total anomie (Mean = 69.73) as compared to male students (Mean = 67.91). The results indicate that female students have more feeling of anomie as compared to their male counterparts. Indeed, it may be due to corruption in social environment, lack of moral standards in society, mistrust in higher public officials, unemployment and faulty or biased recruitment policy which lead female students to perceive more anomie as compared to male students (Channabasavanna & Bhatti, 1975).

## **AGE**

It can be observed from the Table 4.14 that the F-ratio for differences in meaninglessness, distrust, moral decline and total anomie of undergraduate students from two age groups i.e. upto-20 years and above-20 years, came out to be (15.299,  $p < 0.01$ ), (5.234,  $p < 0.05$ ), (23.662,  $p < 0.01$ ), (26.189,  $p < 0.01$ ). This indicates that two groups of undergraduate students differ significantly on their scores of meaninglessness, distrust, moral decline and total anomie. Thus, the data provide sufficient evidence to reject hypothesis 2(b) “There exists no significant difference in anomie of undergraduate students on the basis of age”. Meaning thereby undergraduate students from two age groups differ significantly in their perception of anomie.

After reviewing the corresponding mean scores in the descriptive statistics Table 4.13, it was found that undergraduate students having age upto-20 years score more (Mean=26.77) as compared to above-20 years (Mean=25.82) on ‘meaninglessness’ dimension of anomie. In distrust dimension, upto-20 years age

group, undergraduate students perceive more anomie (Mean=26.63) as compared to above-20 years age group (Mean=26.21). Also, upto-20 years age group undergraduate students score more on moral decline (Mean=16.39) dimension as compared to above-20 years (Mean=15.45) age group undergraduate students. Also, upto-20 years undergraduate students score higher on total anomie (Mean=69.99) as compared to above-20 years undergraduate students (Mean=67.48). This indicates that upto-20 years undergraduate students perceive more anomie as compared to their above-20 years counterparts. This implies that younger students feel more loneliness, powerlessness and uncertainty in future life plans which lead them to get perception of anomie.

### **SOCIO-ECONOMIC STATUS**

It is clear from the Table 4.14 that the F-ratio for the differences between undergraduate students from low and high socio-economic status families in meaninglessness came out to be (F-ratio = 6.671,  $p < 0.05$ ), in distrust (F-ratio = 2.219), in moral decline (F-ratio = 3.172), and in total anomie (F-ratio = 8.730,  $p < 0.01$ ). This indicates that undergraduate students from low and high socio-economic status families differ significantly on their scores of meaninglessness and total anomie whereas undergraduate students in distrust and moral decline do not differ significantly. Thus, the data provide sufficient evidence to reject hypothesis 2(c) “There exists no significant difference between undergraduate students from low and high socio-economic status in their anomie” for meaninglessness and total anomie. The results indicate that low and high socio-economic status undergraduate students differ significantly in their perception of anomie.

After reviewing the corresponding mean scores in the descriptive statistics in the Table 4.13, it was found that undergraduate students from low socio-economic status score more (Mean=26.68) as compared to undergraduate students from high socio-economic status (Mean=25.86) on ‘meaninglessness’ dimension of anomie. On the other hand, significant difference was found in total anomie where undergraduate students from low socio-economic status have greater mean score (Mean=69.67) as compared to undergraduate students from high socio-economic status (Mean=67.70). Thus, it was concluded that undergraduate students from low socio-economic status have more perception of anomie as compared to undergraduate students from high socio-economic status.

## TWO ORDER INTERACTION

### Gender X Age

It has been observed from the Table 4.14 that the F-ratios for the interaction between gender and age of the undergraduate students on the scores of meaningfulness, distrust, moral decline and total score of anomie came out to be (6.928,  $p < 0.05$ ), (7.645,  $p < 0.01$ ), (1.628), (9.740,  $p < 0.01$ ). This indicates that two groups of undergraduate students as a result of interaction of gender and age differ significantly in their scores of 'meaninglessness, 'distrust', and total score of anomie. Thus, the data provide sufficient evidence to reject the hypothesis 2(d) "There is no significant interaction effect of gender and age on anomie of undergraduate students" for 'meaninglessness, 'distrust', and total scores of anomie. Meaning thereby that male and female undergraduate students from two age groups i.e. upto-20 and above-20 years are not same in their perception of anomie. So, there is a significant interaction effect of gender and age on their meaningfulness, distrust and perception of anomie.

However, F-value for interaction effect of gender and age on 'meaninglessness', 'distrust' dimensions and total anomie has been found significant at 0.05 or 0.01 level of confidence. To proceed for further analyze the significant difference between various groups; t-test has been applied on 'meaninglessness', 'distrust' and total anomie and obtained results are presented in the Table 4.15 to 4.17.

**TABLE 4.15**  
**SUMMARY OF 't'-VALUES FOR AGE WISE SUB GROUPS IN**  
**'MEANINGLESSNESS' DIMENSION OF ANOMIE**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males Upto-20 years	M= 26.05 SD= 5.03 N= 378	Males above-20 years	M= 25.67 SD= 4.23 N= 216	0.982
Males Upto-20 years	M= 26.05 SD= 5.03 N= 378	Females upto-20 years	M= 27.90 SD= 5.01 N= 241	4.473**
Males Upto-20 years	M= 26.05 SD= 5.03 N= 378	Females above-20 years	M= 25.92 SD= 5.19 N= 335	0.339
Females upto-20 years	M= 27.90 SD= 5.01	Males above-20 years	M= 25.67 SD= 4.23	5.157**

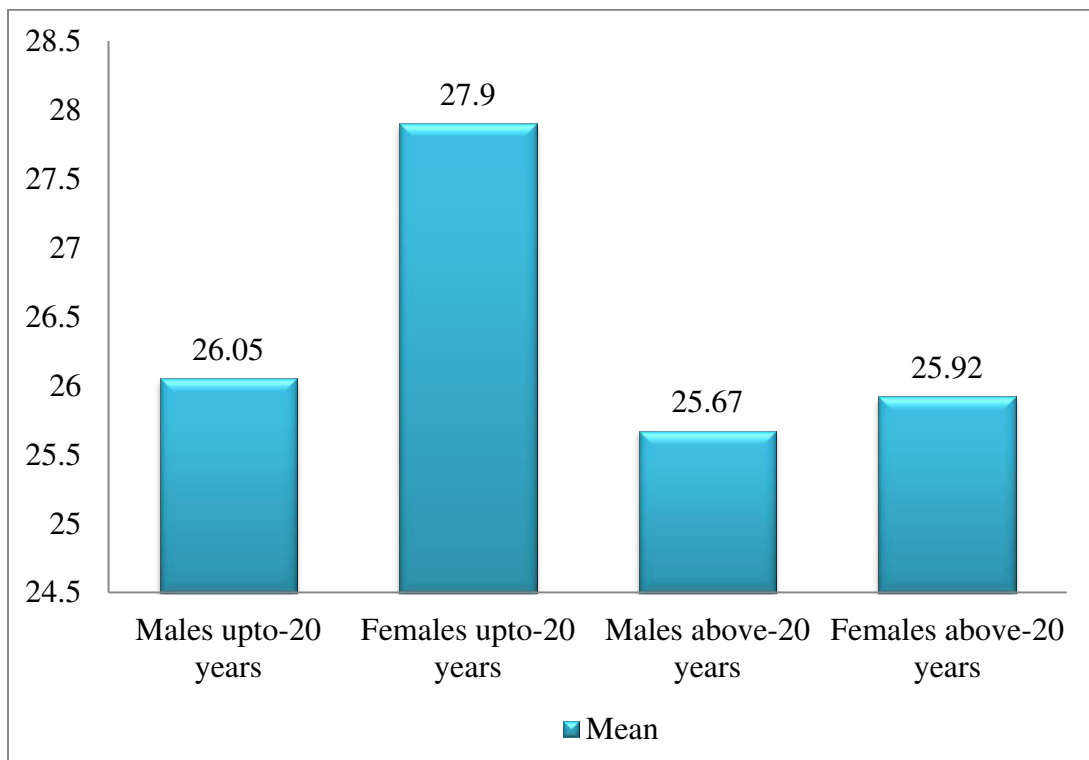
	N= 241		N= 216	
Females upto-20 years	M= 27.90 SD= 5.01 N= 241	Females above-20 years	M= 25.92 SD= 5.19 N= 335	4.609**
Males above-20 years	M= 25.67 SD= 4.23 N= 216	Females above-20 years	M= 25.92 SD= 5.19 N= 335	0.619

\*\*/\*Significant at 0.01 or 0.05 level of confidence

It is clear from Table 4.15 that t-value for 3 sub-groups was found to be significant at either 0.01 or 0.05 level of confidence. It is clear that female undergraduate students of age group upto-20 years score more (Mean=27.90) than male undergraduate students of age group upto-20 years (Mean=26.05), male undergraduate students of age group above-20 years (Mean=25.67) and female undergraduate students of age group above-20 years (Mean=25.92) on ‘meaninglessness’ dimension of anomie. Meaning thereby that female undergraduate students of age group upto-20 years feel more frustration, isolation, hopeless and anxiety in life as compared to other sub-groups. Mean scores on the ‘meaninglessness’ dimension of anomie is shown in below given Figure 4.10.

**FIGURE 4.10**

**AGE GROUP WISE MEAN SCORES OF UNDERGRADUATE STUDENTS IN ‘MEANINGLESSNESS’ DIMENSION OF ANOMIE**



**TABLE 4.16****SUMMARY OF ‘t’-VALUES FOR AGE WISE SUB GROUPS IN ‘DISTRUST’  
DIMENSION OF ANOMIE**

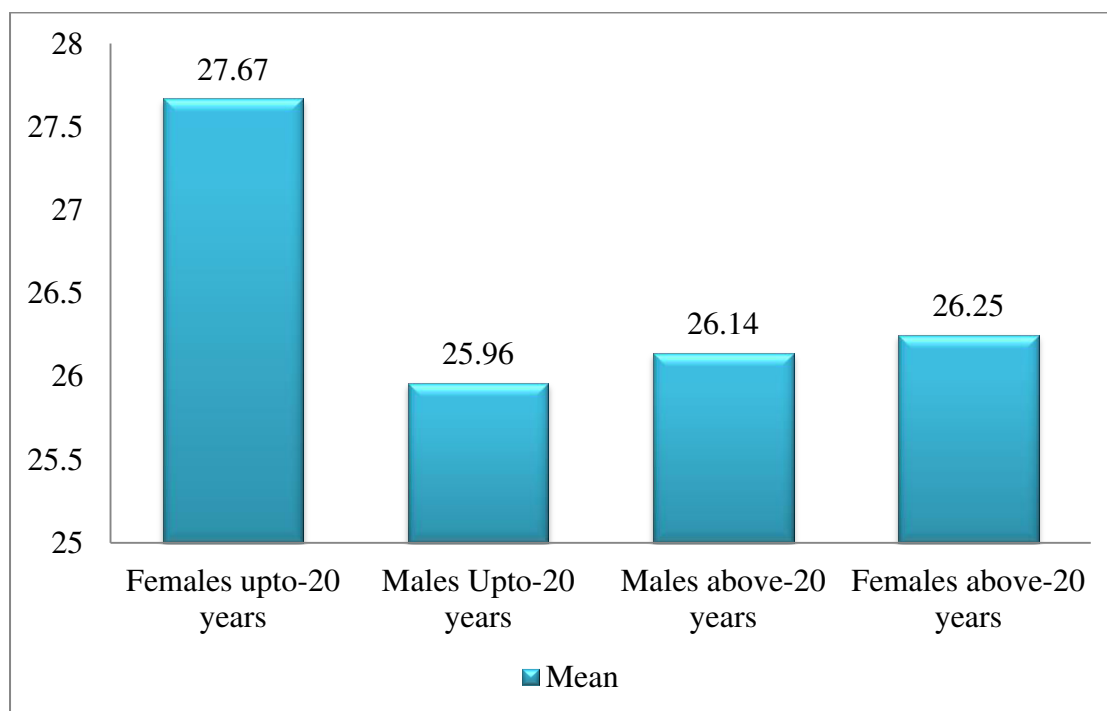
<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males Upto-20 years	M= 25.96 SD= 5.15 N= 378	Males above-20 years	M= 26.14 SD= 4.99 N= 216	0.418
Males Upto-20 years	M= 25.96 SD= 5.152 N= 378	Females upto-20 years	M= 27.67 SD= 5.90 N= 241	3.691**
Males Upto-20 years	M= 25.96 SD= 5.152 N= 378	Females above-20 years	M= 26.25 SD= 5.17 N= 335	0.749
Females upto-20 years	M= 27.67 SD= 5.904 N= 241	Males above-20 years	M= 26.14 SD= 4.991 N= 216	3.299**
Females upto-20 years	M= 27.67 SD= 4.904 N= 241	Females above-20 years	M= 26.25 SD= 5.179 N= 335	3.348**
Males above-20 years	M= 26.14 SD= 4.991 N= 216	Females above-20 years	M= 26.25 SD= 5.179 N= 335	0.249

\*/\*\*Significant at 0.05 and 0.01 level of confidence

Table 4.16 indicated that the t-value for 3 sub-groups was found to be significant either at the 0.01 or 0.05 level of confidence. Further, it is clear that female undergraduate students of age group upto-20 years score more (Mean=27.67) than male undergraduate students of age group upto-20 years (Mean=25.96); male undergraduate students of age group above-20 years (Mean=26.14) and female undergraduate students of age group above-20 years (Mean=26.25) on ‘distrust’ dimension of anomie. Meaning thereby that female undergraduate students of age group upto-20 years perceive more distrust in society as compared to other sub-groups. Mean scores on the ‘distrust’ dimension of anomie is shown in below given Figure 4.11.

**FIGURE 4.11**

**AGE GROUP WISE MEAN SCORES OF UNDERGRADUATE STUDENTS IN 'DISTRUST' DIMENSION OF ANOMIE**



**TABLE 4.17**

**SUMMARY OF 't'-VALUES FOR AGE WISE SUB GROUPS OF UNDERGRADUATE STUDENTS IN TOTAL SCORES OF ANOMIE**

Groups	Parameter	Groups	Parameter	t-value
Males upto-20 years	M= 68.35 SD= 10.14 N= 378	Males above-20 years	M= 67.13 SD= 8.70 N= 216	1.546
Males upto-20 years	M= 68.35 SD= 10.14 N= 378	Females upto-20 years	M= 72.56 SD= 9.77 N= 241	5.151**
Males upto-20 years	M= 68.35 SD= 10.14 N= 378	Females above-20 years	M= 67.70 SD= 10.15 N= 335	0.854
Female upto-20 years	M= 72.56 SD= 9.77 N= 241	Males above-20 years	M= 67.13 SD= 8.70 N= 216	6.285**
Female upto-20 years	M= 72.56 SD= 9.77 N= 241	Females above-20 years	M= 67.70 SD= 10.15 N= 335	5.794**
Males above-20 years	M= 67.13 SD= 8.70 N= 216	Females above-20 years	M= 67.70 SD= 10.15 N= 335	0.703

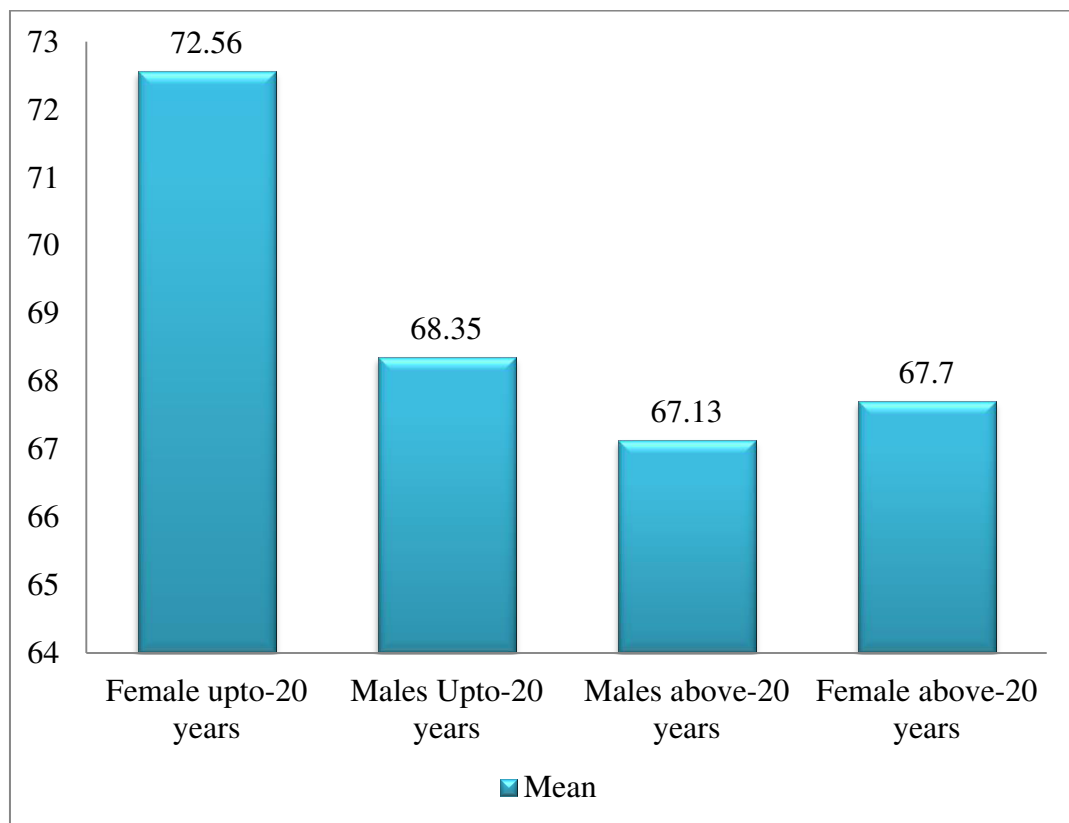
\*/\*\*Significant at 0.05 and 0.01 level of confidence



Table 4.17 indicated that the t-value for 3 sub-groups was found to be significant at either 0.01 or 0.05 level of confidence. Further, it is clear from Table 4.17 that female undergraduate students of age group upto-20 years score more (Mean=72.56) as compared to male undergraduate students of age group upto-20 years (Mean=68.35); male undergraduate students of age group above-20 years (Mean=67.13) and female undergraduate students of age group above-20 years (Mean=67.70) on total anomie. Meaning thereby that, female undergraduate students of age group upto-20 years perceive more anomie as compared to other sub-groups. Mean scores on the total anomie is shown in below given Figure 4.12.

**FIGURE 4.12**

**AGE GROUP WISE MEAN SCORES OF UNDERGRADUATE STUDENTS IN TOTAL ANOMIE**



**Gender X Socio-economic Status**

Table 4.14 revealed that the F-ratio for the interaction between gender and socio-economic status of undergraduate students on meaninglessness, distrust, moral decline dimensions and total anomie has been found to be (7.446,  $p < 0.01$ ), .282, 2.17, and (4.324,  $p < 0.05$ ). The results indicate that the main effects i.e. gender and socio-

economic status are significant for meaningfulness and total anomie of undergraduate students. Therefore, the data provide sufficient evidence to reject the hypothesis 2(e) “There is no significant interaction effect of gender and socio-economic status on anomie of undergraduate students” for meaningfulness and total anomie. Meaning thereby gender and socio-economic status affects significantly on undergraduate students’ perception of anomie.

However, F-value for interaction effect of gender and socio-economic status on dimension ‘meaninglessness’ and total anomie has been found significant at either 0.01 or 0.05 level of confidence. To find significant difference between various groups; t-test has been applied on meaningfulness and total anomie and obtained results are presented in the Table 4.18.

**TABLE 4.18**

**SUMMARY OF ‘t’-VALUES FOR SUB GROUPS OF UNDERGRADUATE STUDENTS IN ‘MEANINGLESSNESS’ DIMENSION OF ANOMIE**

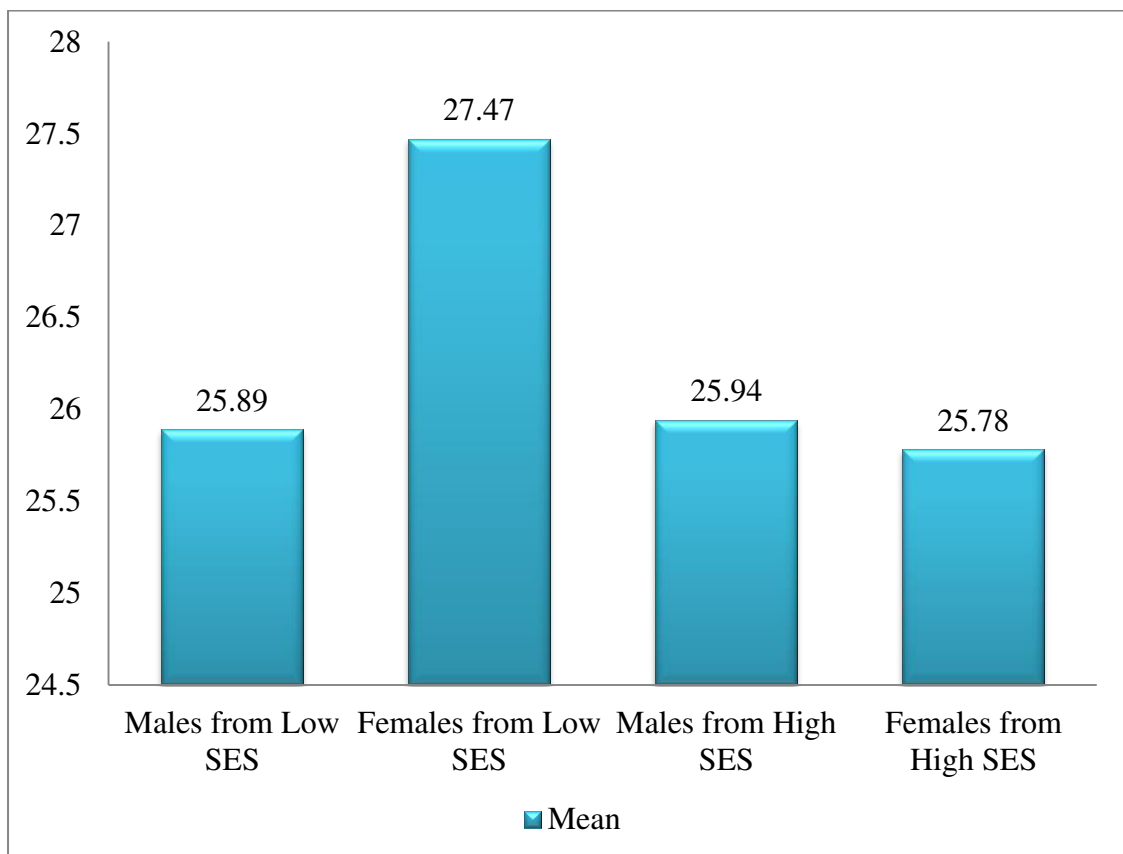
<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 25.89 SD= 4.65 N= 330	Females from Low SES	M= 27.47 SD= 5.17 N= 329	4.124**
Males from Low SES	M= 25.89 SD= 4.65 N= 330	Females from High SES	M= 25.78 SD= 5.10 N= 247	0.266
Males from Low SES	M= 25.89 SD= 4.65 N= 330	Males from High SES	M= 25.94 SD= 4.88 N= 264	0.127
Females from Low SES	M= 27.47 SD= 5.17 N= 329	Females from High SES	M= 25.78 SD= 5.10 N= 247	3.913**
Males from High SES	M= 25.94 SD= 4.88 N= 264	Females from High SES	M= 25.78 SD= 5.10 N= 247	0.362
Males from High SES	M= 25.94 SD= 4.88 N= 264	Females from Low SES	M= 27.47 SD= 5.17 N= 329	3.695**

\*\*/\*Significant at 0.01 or 0.05 level of confidence

Table 4.18 indicated that the t-value for 3 sub-groups was found to be significant at either 0.01 or 0.05 level of confidence. It is clear from table 4.18 that female undergraduate students from low SES score more (Mean=27.47) than male undergraduate students from low SES (Mean=25.89), female undergraduate students from high SES (Mean=25.78) and male undergraduate students from high SES (Mean=25.94) on meaninglessness dimension of anomie. Meaning thereby female undergraduate students from low SES perceive more meaningless dimension of anomie as compared to other sub-groups. Mean scores on the ‘meaninglessness’ dimension of anomie is shown in below given Figure 4.13.

**FIGURE 4.13**

**MEAN SCORES OF UNDERGRADUATE STUDENTS FROM HIGH AND LOW SES IN ‘MEANINGLESSNESS’ DIMENSION OF ANOMIE**



**TABLE 4.19****SUMMARY OF 't'-VALUES FOR THE SUB GROUPS OF UNDERGRADUATE STUDENTS IN TOTAL SCORE OF ANOMIE**

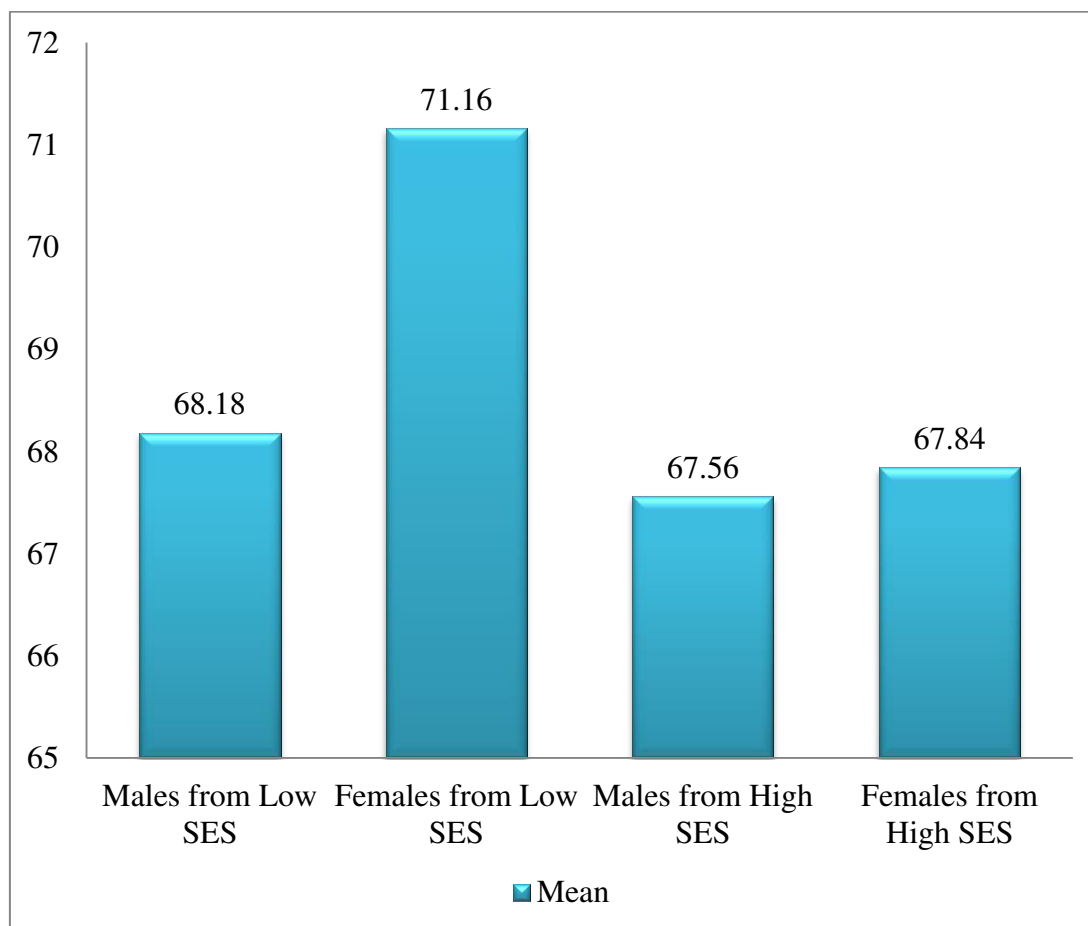
<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 68.18 SD= 9.49 N= 330	Females from Low SES	M= 71.16 SD= 10.35 N= 329	3.852**
Males from Low SES	M= 68.18 SD= 9.49 N= 330	Females from High SES	M= 67.84 SD= 9.86 N= 247	0.416
Males from Low SES	M= 68.18 SD= 9.49 N= 330	Males from High SES	M= 67.56 SD= 9.86 N= 264	0.774
Females from Low SES	M= 71.16 SD= 10.35 N= 329	Females from High SES	M= 67.84 SD= 9.86 N= 247	3.915**
Males from High SES	M= 67.56 SD= 9.86 N= 264	Females from High SES	M= 67.84 SD= 9.86 N= 247	0.321
Males from High SES	M= 67.56 SD= 9.86 N= 264	Females from Low SES	M= 71.16 SD= 10.35 N= 329	4.322**

\*\*/\*Significant at 0.01 or 0.05 level of confidence

Table 4.19 revealed that the t-value for 3 sub-groups was found to be significant at either 0.01 or 0.05 level of confidence. From Table 4.13, it is clear that female undergraduate students from Low SES score more (Mean=71.16) as compared to male undergraduate students from Low SES (Mean=68.18); female undergraduate students from High SES (Mean=67.84) and male undergraduate students from high SES (Mean=67.56) on total anomie. Meaning thereby female undergraduate students from low SES families perceive more anomie as compared to other sub-groups. Mean scores on the total anomie is shown in below given Figure 4.14.

**FIGURE 4.14**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN TOTAL SCORES OF ANOMIE**



**Age X Socio-economic Status**

Table 4.14 revealed that the F-ratio for the interaction between age and socio-economic status of undergraduate students on meaninglessness, distrust, moral decline and total anomie has been found to be .164, (5.464,  $p < 0.05$ ), 3.026, and .282 respectively. All F-ratios are insignificant at 0.05 level except distrust, which is found significant at 0.05 level of confidence. The results indicate that there is no significant main effect of age and socio-economic status on meaninglessness, moral decline and total anomie. Therefore, the data does not provide sufficient evidence to reject the null hypothesis 2(f) “There is no significant interaction effect of age and socio-economic status on anomie of undergraduate students” for meaninglessness, moral decline and total anomie.

However, F-value for interaction effect of age and socio-economic status on dimension ‘distrust’ has been found significant at 0.05 level of confidence. t-test was applied on ‘distrust’ dimensions of anomie and obtained results are presented in the Table 4.20.

**TABLE 4.20**  
**SUMMARY OF ‘t’-VALUES FOR THE SUB GROUPS IN RESPECT OF**  
**‘DISTRUST’ DIMENSION OF ANOMIE**

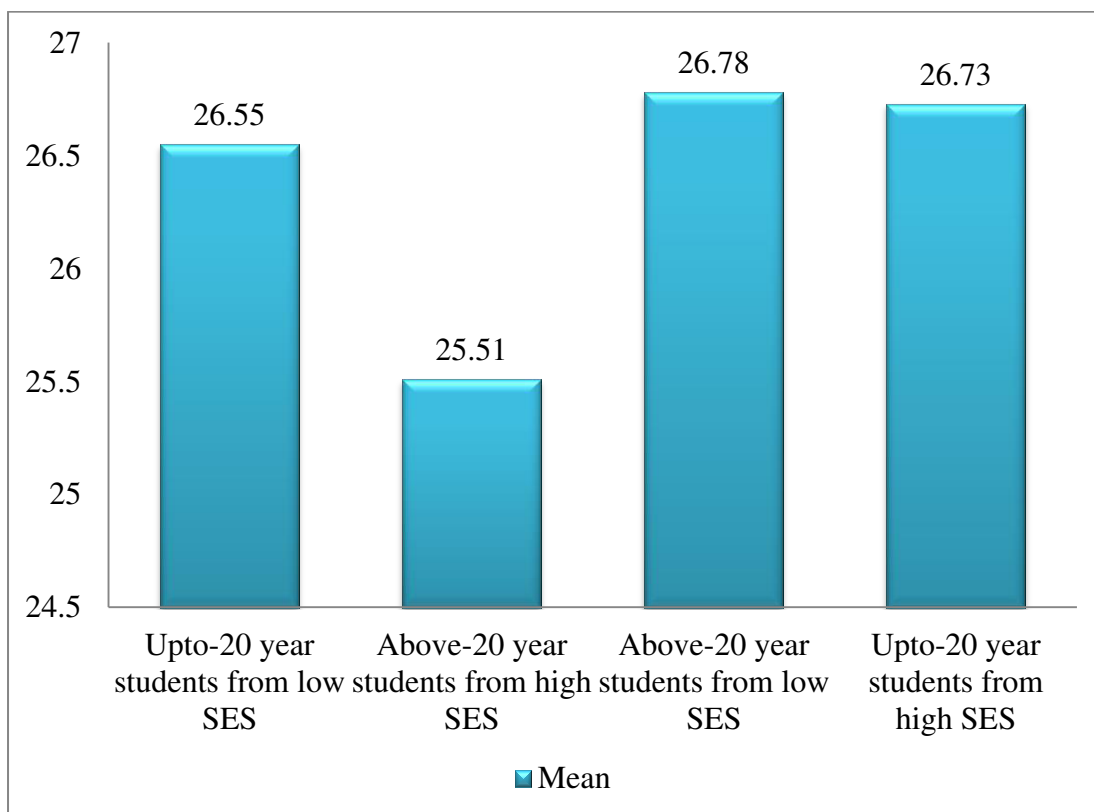
Groups		Parameter	Groups		Parameter	t-value
Upto-20	year	M= 26.55	Upto-20	year	M= 26.73	0.436
students from low		SD= 5.25	students	from	SD= 4.94	
SES		N= 356	high SES		N= 263	
Upto-20	year	M= 26.55	Above-20	year	M= 26.78	0.585
students from low		SD= 5.25	students from low		SD= 4.84	
SES		N= 356	SES		N= 303	
Upto-20	year	M= 26.55	Above-20	year	M= 25.51	2.376*
students from low		SD= 5.25	students from high		SD= 5.32	
SES		N= 356	SES		N= 248	
Above-20	year	M= 26.78	Upto-20	year	M= 26.73	0.121
students from low		SD= 4.84	students	from	SD= 4.94	
SES		N= 303	high SES		N= 263	
Upto-20	year	M= 26.73	Above-20	year	M= 25.51	2.682**
students from		SD= 4.94	students from high		SD= 5.32	
high SES		N= 263	SES		N= 248	
Above-20	year	M= 26.78	Above-20	year	M= 25.51	2.903**
students from low		SD= 4.84	students from high		SD= 5.32	
SES		N= 303	SES		N= 248	

\*\*/\* Significant at 0.01 or 0.05 level of confidence

It is clear from Table 4.20 that the t-value for 3 sub-groups was found to be significant at the 0.01 or 0.05 level of confidence. Further, it is clear that upto-20 year undergraduate students from low SES score more (Mean=26.55) as compared to above-20 year undergraduate students from high SES (Mean=25.51) whereas upto-20 year undergraduate students from high SES score more (Mean=26.73) as compared to above-20 year undergraduate students from high SES (Mean=25.51). In addition, above-20 year undergraduate students from low SES score more (Mean=26.78) as compared to above-20 year undergraduate students from high SES (Mean=25.51) on ‘distrust’ dimension of anomie. Mean scores on the ‘distrust’ dimension of anomie are shown in below given Figure 4.15.

**FIGURE 4.15**

**AGE GROUP WISE MEAN SCORES OF UNDERGRADUATE STUDENTS IN  
'DISTRUST' DIMENSION OF ANOMIE**



**THREE ORDER INTERACTION**

**Gender X Age X Socio-economic status**

Table 4.14 displays that the F-ratios for the interaction between gender, age and socio-economic status for meaningfulness, distrust, moral decline and total anomie has been found to be .086, 1.009, .551 and 1.004, which are not found to be significant even at the 0.05 level of confidence. This indicates that undergraduate students on the scores of 'meaningfulness', 'distrust', 'moral decline' and total anomie as a result of interaction of gender, age and socio-economic status for different sub-groups do not differ significantly. Thus, the data does not provide sufficient evidence to reject the hypothesis 2(g) "There is no significant interaction effect of gender, age and socio-economic status on anomie of undergraduate students". Meaning thereby that sub-groups of undergraduate students as a result of interaction of gender, age and socio-economic status do not differ significantly on anomie.

## **DISCUSSION ON RESULTS**

The above results showed that there was significant gender, age and socio-economic status differences in anomie of undergraduate students. Hence, it was found that there is a significant difference between male and female undergraduate students on meaninglessness, distrust, moral decline, and total anomie. Female undergraduate students perceive more anomie as compared to male undergraduate students due to perception of moral decadence and confusion about rules in society. Having female students more anomic may be due to perception of distrust on higher authority or administration of colleges or state levels. Higher feeling of anomie among undergraduate female students may show insecurity within the female sex in lieu of settlement and employment (Channabasavanna & Bhatti, 1975). These issues may inculcate perception of academic anomie, which generates a meaningless life as at the individual or college level among female students. This result is consistent with Channabasavanna and Bhatti (1975); De Vaus, (2002, as cited in Li, Li, & Feldman, 2015) found female students perceive more anomie as compared to male students.

Examination of the statistical results suggests that undergraduate students having below-20 year's age perceive more anomie as compared to their above-20 year counterparts. There may have some possible explanations like younger undergraduate student perceive a breaking social rules, norms, own personal value and rule systems as compared to others. The justification behind, the severe degree of perception of anomie among the younger students could be due to anxiety and frustration in the contemporary age of competitions. Younger students have low levels of ambitions are more probable to be frustrated and this frustration might account for higher perception of anomie which directly upsurges discouragement, despair, and hopelessness among younger students. This result is consistent with Zhao & Cao (2010); Cao (2004); Jensen (2002). Conversely, Rhodes, (1964) found that teenagers have a high level of anomie when there was an extensive difference between opportunity and aspiration for success.

Significant difference was found between undergraduate students from low socio-economic status and higher socio-economic status families. The undergraduate students from low socio-economic status perceive more anomie as compared to high socio-economic status students. It may be due to reason that lower socio-economic status individuals are apt to be more anomic since they lack more resources for



reaching the success (Ryan, 1981). Low socio-economic status students have high level of achievement aspiration which leads them to develop feeling of anomie anxiety. This finding has been supported by a large body of studies (Bell, 1957; Channabasavanna & Bhatti, 1975); Carr & Hauser, 1976; Lee, & Clyde, 1974; Menard, 1995; Mizruchi, 1960; Rushing, 1971, Teevan, 1975).

Apart from above results, significant interaction effect was found between gender and age on meaninglessness, distrust and total anomie of undergraduate students. This means that undergraduate male and female from low and high age groups differ in their anomie. The two-order interaction between gender and socio-economic status was found to be significant for meaninglessness and total anomie of undergraduate students which means that male and female students from low and high SES families vary in their meaninglessness, distrust and total anomie. The two-order interaction between age and socio-economic status was found to be significant for distrust dimension of anomie which means that students from two age groups having high and low SES differ in their distrust. To conclude, gender, age and socio-economic status significantly influence anomie of undergraduate students. However, three-order interaction effects didn't influence anomie of undergraduate students.

#### **4.3.3. SUMMARY OF 2X2X2 ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF PERSONALITY HARDINESS WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

To study the personality hardiness of male and female undergraduate students from two age groups having low and high socio-economic status, descriptive statistics were calculated for control, commitment, challenge dimensions and total personality hardiness and the results are presented in the Table 4.21.

**TABLE 4.21**

#### **DESCRIPTIVE STATISTICS OF VARIOUS DIMENSIONS AND TOTAL PERSONALITY HARDINESS WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>Gender</b>	<b>Age</b>	<b>SES</b>		<b>CL</b>	<b>CT</b>	<b>CE</b>	<b>TPH</b>	
<b>Male</b>	Upto-20	Low SES	M=	34.87	32.96	33.12	100.95	
			N= 213	SD=	5.187	5.215	5.064	12.727
		High SES	M=	35.23	32.85	33.31	101.39	
			N= 165	SD=	4.852	5.150	5.114	11.512
		TOTAL	M=	35.03	32.91	33.20	101.14	
		N= 378	SD=	5.040	5.180	5.080	12.198	

		Low SES	M=	35.92	33.87	34.49	104.28
		N= 117	SD=	4.275	5.381	5.013	12.249
	Above-20	High SES	M=	35.76	33.57	33.98	103.30
		N= 99	SD=	4.957	4.798	4.905	11.392
		TOTAL	M=	35.85	33.73	34.25	103.83
		N= 216	SD=	4.590	5.113	4.959	11.847
	Total	Low SES	M=	35.24	33.28	33.61	102.13
		N=330	SD=	4.903	5.285	5.081	12.642
		High SES	M=	35.43	33.12	33.56	102.11
		N=264	SD=	4.889	5.024	5.038	11.483
		TOTAL	M=	35.32	33.21	33.59	102.12
		N=594	SD=	4.894	5.167	5.058	12.131
		Low SES	M=	33.09	31.68	31.31	96.08
		N= 143	SD=	6.208	6.381	6.107	16.341
	Upto-20	High SES	M=	33.53	33.27	33.35	100.14
		N= 98	SD=	5.914	5.728	5.524	14.945
		TOTAL	M=	33.27	32.32	32.14	97.73
		N= 241	SD=	6.081	6.161	5.951	15.883
	Total	Low SES	M=	34.83	32.76	33.72	101.32
		N= 186	SD=	4.706	5.579	5.182	12.853
<b>Female</b>	Above-20	High SES	M=	35.93	33.40	33.53	102.87
		N= 149	SD=	4.408	4.723	4.315	10.702
		TOTAL	M=	35.32	33.05	33.64	102.01
		N= 335	SD=	4.602	5.218	4.809	11.952
	Total	Low SES	M=	34.08	32.29	32.67	99.04
		N=329	SD=	5.470	5.956	5.721	14.682
		High SES	M=	34.98	33.35	33.46	101.79
		N=247	SD=	5.183	5.135	4.821	12.600
		TOTAL	M=	34.46	32.74	33.01	100.22
		N=576	SD=	5.363	5.638	5.363	13.883
		Low SES	M=	34.15	32.44	32.39	98.99
		N=356	SD=	5.678	5.738	5.570	14.466
	Upto-20	High SES	M=	34.60	33.00	33.32	100.92
		N=263	SD=	5.326	5.366	5.260	12.884
		TOTAL	M=	34.34	32.68	32.79	99.81
		N=619	SD=	5.531	5.585	5.456	13.838
	Total	Low SES	M=	35.25	33.19	34.02	102.46
		N=303	SD=	4.569	5.521	5.123	12.686
	Above-20	High SES	M=	35.86	33.47	33.71	103.04
		N=248	SD=	4.626	4.744	4.555	10.962
		TOTAL	M=	35.53	33.32	33.88	102.72
		N=551	SD=	4.600	5.183	4.873	11.933
<b>Total</b>	Total	Low SES	M=	34.66	32.79	33.14	100.59
		N=659	SD=	5.223	5.647	5.426	13.775
		High SES	M=	35.21	33.23	33.51	101.95
		N=511	SD=	5.033	5.074	4.930	12.025
		TOTAL	M=	34.90	32.98	33.30	101.18
		N=1170	SD=	5.146	5.407	5.216	13.052

**NOTE:** SES=Socio-economic status, CL=Control, CT= Commitment, CE= Challenge TPH= Total Personality Hardiness

In order to analyze the variance of control, commitment and challenge dimensions and total personality hardiness of the male and female undergraduate students from low and high SES having age upto-20 and above-20 years, the obtained scores were subjected to ANOVA and the comprehensive details of the results have been presented in the Table 4.22.

**TABLE 4.22**  
**SUMMARY OF 2X2X2 ANOVA WITH RESPECT TO VARIOUS**  
**DIMENSIONS AND TOTAL PERSONALITY HARDINESS IN RELATION**  
**TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>CONTROL</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	328.644	328.644	12.759	.000
<b>Age</b>	1	558.763	558.763	21.692	.000
<b>SES</b>	1	51.322	51.322	1.992	.158
<b>G*A</b>	1	111.920	111.920	4.345	.037
<b>G*S</b>	1	30.733	30.733	1.193	.275
<b>A*S</b>	1	.300	.300	.012	.914
<b>G*A*S</b>	1	24.012	24.012	.932	.334
<b>Error</b>	1162	29931.446	25.759		
<b>Total</b>	1170	1456098.000			
<b>COMMITMENT</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	77.591	77.591	2.671	.102
<b>Age</b>	1	138.762	138.762	4.777	.029
<b>SES</b>	1	55.873	55.873	1.923	.166
<b>G*A</b>	1	2.846	2.846	.098	.754
<b>G*S</b>	1	118.903	118.903	4.093	.043
<b>A*S</b>	1	22.324	22.324	.768	.381
<b>G*A*S</b>	1	9.607	9.607	.331	.565
<b>Error</b>	1162	33754.967	29.049		
<b>Total</b>	1170	1306783.000			
<b>CHALLENGE</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	152.625	152.625	5.725	.017
<b>Age</b>	1	365.554	365.554	13.712	.000
<b>SES</b>	1	39.817	39.817	1.494	.222
<b>G*A</b>	1	5.347	5.347	.201	.654
<b>G*S</b>	1	80.189	80.189	3.008	.083
<b>A*S</b>	1	145.669	145.669	5.464	.020
<b>G*A*S</b>	1	40.152	40.152	1.506	.220
<b>Error</b>	1162	30978.495	26.660		
<b>Total</b>	1170	1329339.000			
<b>TOTAL PERSONALITY HARDINESS</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	1543.800	1543.800	9.281	.002

<b>Age</b>	1	2974.324	2974.324	17.881	.000
<b>SES</b>	1	438.855	438.855	2.638	.105
<b>G*A</b>	1	125.539	125.539	.755	.385
<b>G*S</b>	1	645.303	645.303	3.879	.049
<b>A*S</b>	1	263.960	263.960	1.587	.208
<b>G*A*S</b>	1	20.573	20.573	.124	.725
<b>Error</b>	1162	193291.963	166.344		
<b>Total</b>	1170	12177576.000			

**NOTE:** G=Gender, A=Age, S=Socio-economic status, SS=Sum of Squares, MSS=Mean Square

F-value at (1, 1162) df= 3.85 (0.05 level); 6.66 (0.01 level)

## MAIN EFFECTS

### GENDER

Table 4.22 revealed that the F-ratio for the differences on control, commitment, challenge and total personality hardiness of male and female undergraduate students has been found to be (12.759,  $p < 0.01$ ), 2.671, (5.725,  $p < 0.05$ ), (9.281,  $p < 0.01$ ) level of confidence. The results indicate that undergraduate male and female students differ significantly on the scores of control, challenge and total personality hardiness. Therefore, the data provides sufficient evidence to reject the hypothesis 3(a) “There exists no significant difference between male and female undergraduate students in their personality hardiness” for control, challenge and total personality hardiness.

From Table 4.21, it was found that male (Mean=35.32) undergraduate students score more as compared to female (Mean=34.46) undergraduate counterparts on control dimension; male (Mean=33.59) undergraduate students score more as compared to female (Mean=33.01) undergraduate in challenge dimension; male (Mean=102.12) undergraduate students score more as compared to female (Mean=100.22) undergraduate students.

### AGE

It was observed from the Table 4.22 that the F-ratio for differences in control, commitment, challenge and total personality hardiness of undergraduate students from two age groups i.e. upto-20 and above-20 years, came out to be (21.692,  $p < 0.01$ ), (4.777,  $p < 0.05$ ), (13.712,  $p < 0.01$ ), (17.881,  $p < 0.01$ ) level of confidence. This indicates that two groups of undergraduate students differ significantly on their scores of control, commitment, challenge, and total personality hardiness. Thus, the data

provides sufficient evidence to reject the hypothesis 3(b) “There exists no significant difference in personality hardiness of undergraduate students on the basis of age”. Meaning thereby there is a significant difference between two age groups of undergraduate students in their personality hardiness.

It is clear from Table 4.21 that undergraduate students having age above-20 years had score more on control trait (Mean=35.53), commitment (Mean=33.32), challenge (Mean=33.88) and total personality hardiness (Mean=102.72) as compared to the mean scores of below-20 years students on control trait (Mean=34.34), commitment (Mean=32.68), challenge (Mean=32.79), and total personality hardiness (Mean=99.81) respectively. This means that students having upto-20 year’s age have low hardy personality as compared to their above 20-years counterparts.

### **SOCIO-ECONOMIC STATUS**

It has been observed from the Table 4.22 that the F-ratio for the differences in control (F-ratio=1.992), commitment (F-ratio=1.923), challenge (F-ratio=1.494) and total personality hardiness (F-ratio=2.638) of undergraduate students. This indicates that undergraduate students from low and high socio-economic status families do not differ significantly on their scores of control, commitment, challenge and total scores of personality hardiness. Thus, the data does not provide sufficient evidence to reject hypothesis 3(c) “There exists no significant difference between undergraduate students from low and high socio-economic status in their personality hardiness”. So, it can be concluded that undergraduate students coming from low and high socio-economic status do not differ in control, commitment or challenge and total personality hardiness.

### **TWO ORDER INTERACTION**

#### **Gender X Age**

It has been observed from the Table 4.22 that the F-ratios for the interaction between gender and age of the undergraduate students on the scores of control, commitment, challenge and total scores of personality hardiness has been found to be (4.345,  $p < 0.05$ ), .098, .201 and .755 respectively. This indicates that two groups of undergraduate students as a result of interaction of gender and age differ significantly on their scores of ‘control’ dimension only. But in case of ‘commitment’, ‘challenge’ and total scores of personality hardiness, undergraduate students do not differ

significantly. Thus, the data does not provide sufficient evidence to reject the hypothesis 3(d) “There is no interaction effect of gender and age on personality hardiness of undergraduate students” for ‘commitment, ‘challenge’, and total scores of personality hardiness. Meaning thereby undergraduate male and female students from two age groups i.e. upto-20 years and above-20 years are same in their commitment, challenge and personality hardiness except control dimension.

However, F-value for interaction effect of gender and age on ‘control’ dimension has been found significant at 0.05 level of confidence. To proceed for further analysis the significant difference between various groups; t-test has been applied on ‘control’ dimension of personality hardiness and obtained results are presented in the Table 4.23.

**TABLE 4.23**  
**SUMMARY OF ‘t’-VALUES FOR THE AGE WISE SUB GROUPS IN**  
**RESPECT OF ‘CONTROL’ DIMENSION OF PERSONALITY HARDINESS**

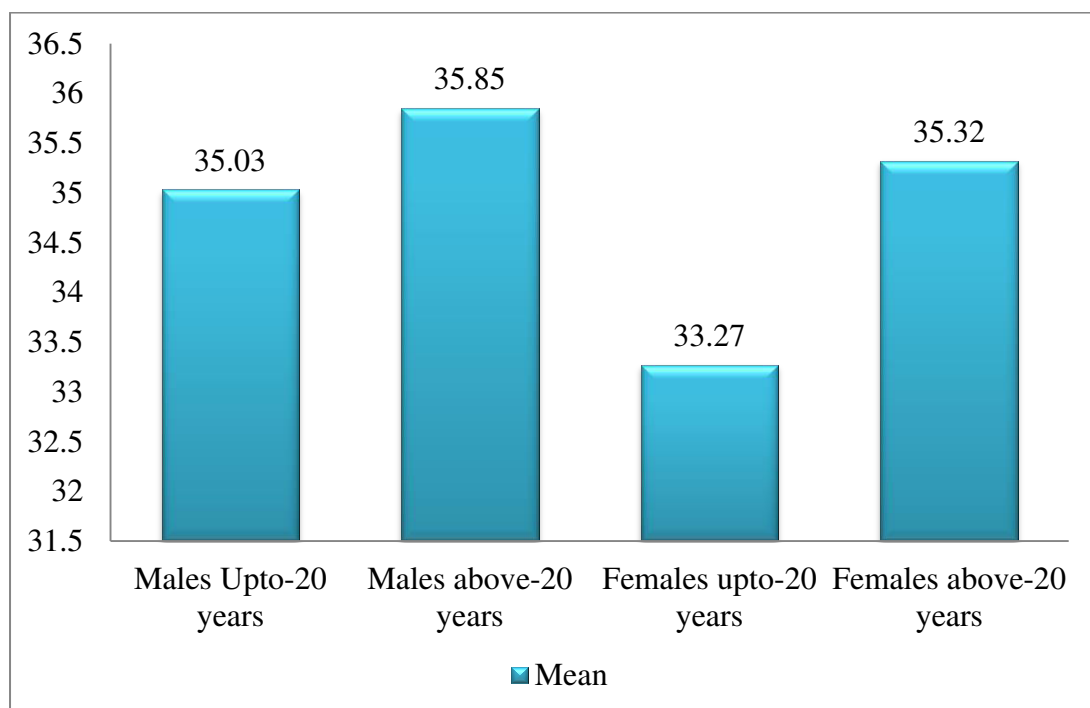
Groups		Parameter	Groups		Parameter	t-value
Males	Upto-20 years	M= 35.03 SD= 5.040 N= 378	Males	above-20 years	M= 35.85 SD= 4.590 N= 216	2.02*
Males	Upto-20 years	M= 35.03 SD= 5.040 N= 378	Females	upto-20 years	M= 33.27 SD= 6.081 N= 241	3.747**
Males	Upto-20 years	M= 35.03 SD= 5.040 N= 378	Females	above-20 years	M= 35.32 SD= 4.602 N= 335	0.803
Female	upto-20 years	M= 33.27 SD= 6.081 N= 241	Males	above-20 years	M= 35.85 SD= 4.590 N= 216	5.15**
Females	upto-20 years	M= 33.27 SD= 6.081 N= 241	Females	above-20 years	M= 35.32 SD= 4.602 N= 335	4.41**
Males	above-20 years	M= 35.85 SD= 4.590 N= 216	Females	above-20 years	M= 35.32 SD= 4.602 N= 335	0.906

\*/\*\*Significant at 0.05 and 0.01 level of confidence

Table 4.23 indicated that the t-value for 4 sub-groups was found to be significant at the 0.01 or 0.05 level of confidence. From means analysis, in the Table 4.21, it is clear that male undergraduate students above-20 years age score more (Mean=35.85) as compared to male undergraduate students upto-20 years

(Mean=35.03) on ‘control’ dimension of personality. Whereas, male undergraduate students upto-20 years score more (Mean=35.03) as compared to female undergraduate students upto-20 years (Mean=33.27) on ‘control’ dimension of personality hardiness. Whereas as male undergraduate students above-20 years score more (Mean=35.03) as compared to female undergraduate students upto-20 years (Mean=33.27) on ‘control’ dimension of personality hardiness. In addition, female undergraduate students above-20 years score more (Mean=35.32) as compared to female undergraduate students upto-20 years (Mean=33.27) on ‘control’ dimension of personality hardiness. Mean scores on the ‘control’ dimension of personality hardiness is shown in given Figure 4.16.

**FIGURE 4.16**  
**MEAN SCORES OF UNDERGRADUATE STUDENTS IN ‘CONTROL’**  
**DIMENSION OF PERSONALITY HARDINESS**



#### **Gender X Socio-economic Status**

Table 4.22 revealed that the F-ratio for the interaction between gender and socio-economic status of undergraduate students on control, commitment, challenge and total personality hardiness has been found to be 1.193, (4.093,  $p < 0.05$ ), 3.008 and (3.879,  $p < 0.05$ ) level of confidence. The results indicate that there is no significant main effects of gender and socio-economic status on control and challenge dimension of personality hardiness. However, gender and socio-economic status combined

effects on students' commitment and total personality hardiness. Therefore, the data provides sufficient evidence to reject hypothesis 3(e) "There is no significant interaction effect of gender and socio-economic status on personality hardiness of undergraduate students" for commitment and total personality hardiness. The result shows that undergraduate students on the scores of personality hardiness as a result of interaction between gender and socio-economic status for various sub-groups differ significantly on their scores of 'commitment', and total scores of personality hardiness.

However, F-value for interaction effect of gender and socio-economic status on 'commitment' dimension and total score of personality hardiness has been found significant at 0.05 level of confidence. To proceed for further analysis the significant difference between various groups; t-test has been applied on 'commitment' dimension and total score of personality hardiness and obtained results are presented in the Table 4.24 and 4.25.

**TABLE 4.24**  
**SUMMARY OF 't'-VALUES FOR GENDER X SOCIO-ECONOMIC STATUS**  
**IN RESPECT OF 'COMMITMENT' DIMENSION OF PERSONALITY**  
**HARDINESS**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 33.28 SD= 5.285 N= 330	Females from Low SES	M= 32.29 SD= 5.956 N= 329	2.257*
Males from Low SES	M= 33.28 SD= 5.285 N= 330	Females from High SES	M= 33.35 SD= 5.135 N= 247	.160
Males from Low SES	M= 33.28 SD= 5.285 N= 330	Males from High SES	M= 33.12 SD= 5.024 N= 264	.378
Females from Low SES	M= 32.29 SD= 5.956 N= 329	Females from High SES	M= 33.35 SD= 5.135 N= 247	2.288*
Males from High SES	M= 33.12 SD= 5.024 N= 264	Females from High SES	M= 33.35 SD= 5.135 N= 247	0.511
Males from High SES	M= 33.12 SD= 5.024 N= 264	Females from Low SES	M= 32.29 SD= 5.956 N= 329	1.707

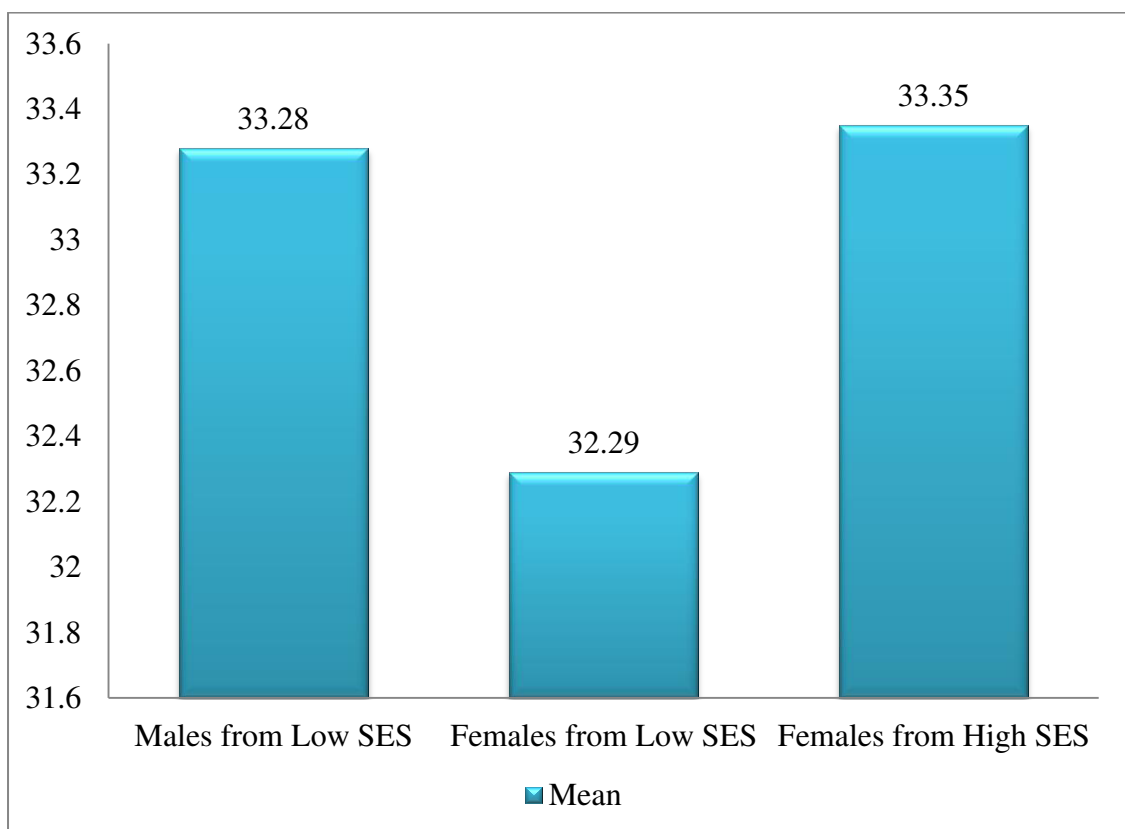
\*/\*\*Significant at 0.05 and 0.01 level of confidence



Reviewing the entries in Table 4.24 indicated that the t-value for 2 sub-groups was found to be significant at 0.01 or 0.05 level of confidence. From means analysis, in the Table 4.21, it is clear that male undergraduate students from low SES score more (Mean=33.28) as compared to female undergraduate students from low SES (Mean=32.29) on ‘commitment’ dimension of personality hardiness. In addition, female undergraduate students from high SES score more (Mean=33.35) as compared to female undergraduate students from low SES (Mean=32.29) on ‘commitment’ dimension of personality hardiness. Mean scores on the ‘commitment’ dimension of personality hardiness is shown in Figure 4.17.

**FIGURE 4.17**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN ‘COMMITMENT’  
DIMENSION OF PERSONALITY HARDINESS**



**TABLE 4.25**

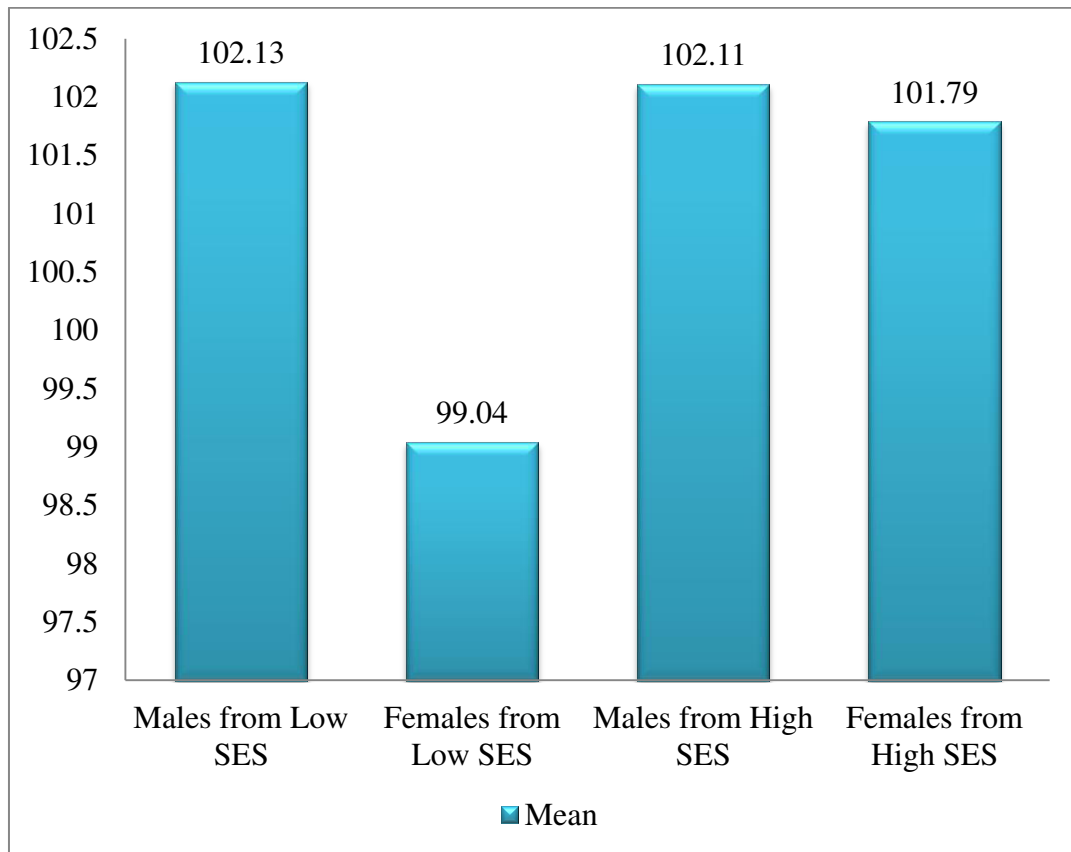
**SUMMARY OF ‘t’-VALUES FOR THE GENDER X SOCIO-ECONOMIC  
STATUS SUB GROUPS OF UNDERGRADUATE STUDENTS IN RELATION  
TO TOTAL SCORE OF PERSONALITY HARDINESS**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 102.13 SD= 12.642 N= 330	Females from Low SES	M= 99.04 SD= 14.68 N= 329	2.895**
Males from Low SES	M= 102.13 SD= 12.642 N= 330	Females from High SES	M= 101.79 SD= 12.60 N= 247	.320
Males from Low SES	M= 102.13 SD= 12.642 N= 330	Males from High SES	M= 102.11 SD= 11.48 N= 264	.020
Females from Low SES	M= 99.04 SD= 14.682 N= 329	Females from High SES	M= 101.79 SD= 12.60 N= 247	2.41*
Males from High SES	M= 102.11 SD= 11.483 N= 264	Females from High SES	M= 101.79 SD= 12.60 N= 247	.299
Males from High SES	M= 102.11 SD= 11.483 N= 264	Females from Low SES	M= 99.04 SD= 14.68 N= 329	2.85**

\*\*/\*Significant at 0.01 and 0.05 level of confidence

Reviewing the entries in Table 4.25 indicated that the t-value for 3 sub-groups was found to be significant at the 0.01 or 0.05 level of confidence. From Table 4.21, it is clear that male undergraduate students from low SES score more (Mean=102.13) as compared to female undergraduate students from low SES (Mean=99.04) on total personality hardiness. Similarly, female undergraduate students from high SES score more (Mean=101.79) as compared to female undergraduate students from low SES (Mean=99.04). Moreover, male undergraduate students from high SES (Mean=102.11) score more as compared to female undergraduate students from low SES (Mean=99.04) on total personality hardiness. Mean scores on the personality hardiness is shown in Figure 4.18.

**FIGURE 4.18**  
**MEAN SCORES OF UNDERGRADUATE STUDENTS IN THE TOTAL**  
**SCORES OF PERSONALITY HARDINESS**



**Age X Socio-economic Status**

Table 4.22 revealed that the F-ratio for the interaction between age and socio-economic status of undergraduate students on control, commitment, challenge and total personality hardiness has been found to be .012, .768, (5.464,  $p < 0.05$ ), and 1.587. All F-ratios are insignificant at 0.05 level of confidence except in the ‘challenge’ dimension, which was found to be significant at 0.05 level of confidence. The result indicates that there is no significant main effect of gender and socio-economic status on control, commitment and total personality hardiness of undergraduate students. Therefore, the data does not provide sufficient evidence to reject the hypothesis 3(f) “There is no significant interaction effect of age and socio-economic status on personality hardiness of undergraduate students” for control, commitment and total personality hardiness. The result shows that undergraduate students on the scores of ‘challenge’ as a result of interaction between age and socio-

economic status for various sub-groups differ significantly on their scores of challenge dimension.

However, F-value for interaction effect of age and socio-economic status on dimension ‘challenge’ has been found significant at 0.05 level of confidence. To proceed for further analysis the significant difference between various groups; t-test has been applied on ‘challenge’ dimension of personality hardiness and obtained results are presented in the Table 4.26.

**TABLE 4.26**  
**‘t’-VALUES FOR THE UNDERGRADUATE STUDENTS IN ‘CHALLENGE’**  
**DIMENSION OF PERSONALITY HARDINESS**

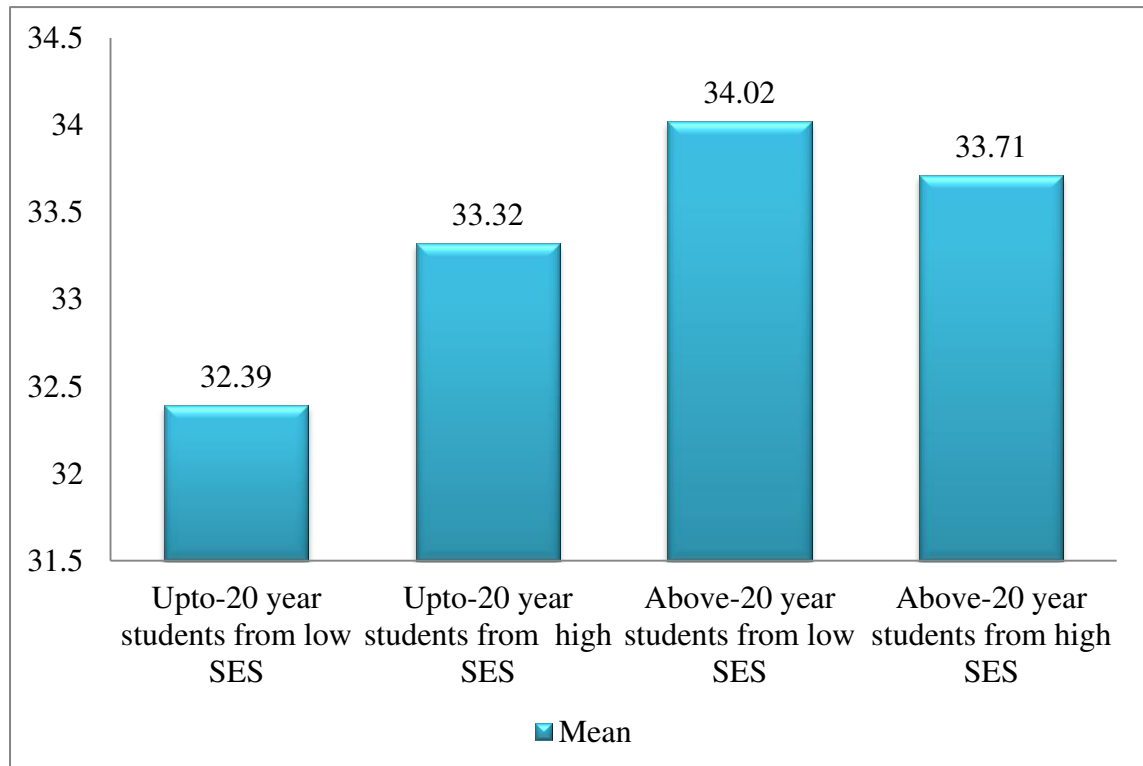
Groups		Parameter	Groups		Parameter	t-value
Upto-20	year	M= 32.39	Upto-20	year	M= 33.32	2.121*
students from low		SD= 5.570	students from		SD= 5.260	
SES		N= 356	high SES		N= 263	
Upto-20	year	M= 32.39	Above-20	year	M= 34.02	3.91**
students from low		SD= 5.570	students from low		SD= 5.123	
SES		N= 356	SES		N= 303	
Upto-20	year	M= 32.39	Above-20	year	M= 33.71	3.196**
students from low		SD= 5.570	students from high		SD= 4.555	
SES		N= 356	SES		N= 248	
Above-20	year	M= 34.02	Upto-20	year	M= 33.32	1.598
students from low		SD= 5.123	students from		SD= 5.260	
SES		N= 303	high SES		N= 263	
Upto-20	year	M= 33.32	Above-20	year	M= 33.71	.897
students from		SD= 5.260	students from high		SD= 4.555	
high SES		N= 263	SES		N= 248	
Above-20	year	M= 34.02	Above-20	year	M= 33.71	.751
students from low		SD= 5.123	students from high		SD= 4.555	
SES		N= 303	SES		N= 248	

Table 4.26 indicated that the t-value for 3 sub-groups was found to be significant at the 0.05 or 0.01 level of confidence. It is clear from Table 4.21 that upto-20 years undergraduate students from high SES score more (Mean=33.32) as compared to upto-20 years undergraduate students from low SES (Mean=32.39). Similarly, above 20-years undergraduate students from low SES score more (Mean=34.02) as compared to upto-20 years undergraduate students from low SES (Mean=32.39). Moreover, above-20 years undergraduate students from high SES score more (Mean=33.71) as compared to upto-20 years students from low SES

(Mean=32.39). Mean scores on the ‘challenge’ dimension of personality hardiness is shown in Figure 4.19.

**FIGURE 4.19**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN ‘CHALLENGE’  
DIMENSION OF PERSONALITY HARDINESS**



**THREE ORDER INTERACTION**

**Gender X Age X Socio-economic Status**

Table 4.22 displays the F-ratios for the interaction between gender, age and socio-economic status for control, commitment, challenge and total personality hardiness, which has been found to be .932, .331, 1.506 and .124, which are not significant even at the 0.05 level of confidence. This indicates that undergraduate students on the scores of ‘control’, ‘commitment’, ‘challenge’ and total personality hardiness as a result of interaction of gender, age and socio-economic status for different sub groups do not differ significantly. Thus, the data does not provide sufficient evidence to reject the hypothesis 3(g) “There is no significant interaction effect of gender, age and socio-economic status on the scores of personality hardiness of undergraduate students”. Meaning thereby sub-groups of undergraduate students as

a result of interaction of gender, age and socio-economic status do not differ significantly.

## **DISCUSSION ON RESULTS**

It was found that male undergraduate students have higher level of belief in control trait, challenge accepting tendency and personality hardiness as compared to their female counterparts. Male undergraduate students have higher levels of personality hardiness than females because males are more capable in managing novel life circumstances, they could accept the negatives and positives, and they could also use diverse approaches to face difficulties resulted in adjusting to life. This finding is consistent with the results of Desai (2017); Kaur (2017); Kiamarsi (1999); Moradi (2010); ValiNezhad (2007); Veisi et al. (2001). Wang and Miao (2007) concluded that females and males are different in personality hardiness because different facilities and resources are available for each gender. Kiamarsi (1999) revealed that males have more personality hardiness as compared to females because males have more excitements and act more reasonably in problematic situations as compared to females. However, Sheard (2009) exposed completely different findings that personality hardiness of school boys is lower than school girls. Some other research studies such as Hosseinpour et al. (2008) exposed no significant gender difference on personality hardiness.

The result from the present research seems to support the notion that above-20 year students have more strong traits like control, commitment, challenge and total personality hardiness as compared to upto-20 year undergraduate students. Examination of findings suggests a number of diverse explanations like above-20 year students are aware about one's work, life events and one's response to those events. These students cope with various stressors, personal, family and college associated activities and relationships. Hardy undergraduate students using active, problem focused coping strategies for dealing with stressful life events. However, older students are more socially adjusted as compared to younger students because hardiness is positively connected with social adjustment (Lee, 1991).

The two order interaction between gender and age was found significant for control dimension of personality hardiness which means that male and female students from high and low SES families vary in their control trait. This means with the interaction

of gender and age the control trait of personality hardiness vary among undergraduate students. The two order interaction between age and socio-economic status was found significant for challenge dimension of personality hardiness which means that students from two age groups having high and low SES vary in their challenge. Apart from above results, a significant interaction effect was found between gender and SES on commitment and personality hardiness of undergraduate students. It means that undergraduate males and females from low and high SES differ in their personality hardiness. To conclude, three order interaction effects of gender, age and socio-economic status do not differ significantly on control, commitment, challenge and total personality hardiness of undergraduate students.

#### **4.3.4. SUMMARY OF 2X2X2 ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF CONTEXTUAL INFLUENCES WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

To study the contextual influences of male and female undergraduate students from two age groups having low and high socio-economic status, descriptive statistics was calculated for different dimensions and the total score of contextual influences and results are presented in Table 4.27.

**TABLE 4.27**  
**DESCRIPTIVE STATISTICS OF VARIOUS DIMENSIONS AND TOTAL CONTEXTUAL INFLUENCES WITH RESPECT TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>Gender</b>	<b>Age</b>	<b>SES</b>		<b>PI</b>	<b>PLI</b>	<b>IC</b>	<b>TCI</b>	
<b>Male</b>	<b>Upto-20</b>	Low SES	M=	62.82	61.71	67.96	192.49	
			N= 213	SD=	15.601	15.911	18.052	37.531
		High SES	M=	60.30	60.21	64.93	185.44	
			N= 165	SD=	13.385	13.106	19.990	34.517
		TOTAL	M=	61.72	61.06	66.63	189.41	
			N= 378	SD=	14.710	14.753	18.956	36.367
	<b>Above-20</b>	Low SES	M=	56.26	58.98	65.49	180.74	
			N= 117	SD=	15.488	13.933	20.545	37.450
		High SES	M=	56.75	59.92	67.45	184.12	
			N= 99	SD=	16.451	14.346	17.487	38.825
		TOTAL	M=	56.49	59.41	66.39	182.29	
			N= 216	SD=	15.901	14.099	19.186	38.035
	<b>Total</b>	Low SES	M=	60.50	60.74	67.08	188.32	
			N=330	SD=	15.852	15.274	18.979	37.866
High SES		M=	58.97	60.10	65.88	184.95		
		N=264	SD=	14.681	13.558	19.095	36.125	

		TOTAL	M=	59.82	60.46	66.55	186.82
		N=594	SD=	15.349	14.528	19.024	37.109
<b>Female</b>	Upto-20	Low SES	M=	63.21	64.45	68.70	196.36
		N= 143	SD=	17.473	17.826	21.459	48.437
		High SES	M=	59.36	59.20	66.01	184.57
		N= 98	SD=	15.093	16.489	21.953	43.437
	Above-20	TOTAL	M=	61.64	62.32	67.61	191.56
		N= 241	SD=	16.623	17.452	21.656	46.737
		Low SES	M=	57.55	59.41	63.25	180.20
		N= 186	SD=	16.657	15.944	20.941	41.536
	Total	High SES	M=	52.08	55.26	57.89	165.22
		N= 149	SD=	16.142	15.522	22.483	41.311
		TOTAL	M=	55.12	57.56	60.86	173.54
		N= 335	SD=	16.630	15.869	21.772	42.041
	Total	Low SES	M=	60.01	61.60	65.62	187.22
		N=329	SD=	17.221	16.947	21.308	45.311
High SES		M=	54.97	56.82	61.11	172.90	
N=247		SD=	16.103	15.997	22.584	43.136	
<b>Total</b>	Upto-20	TOTAL	M=	57.85	59.55	63.68	181.08
		N=576	SD=	16.922	16.701	21.959	44.917
		Low SES	M=	62.98	62.81	68.26	194.04
		N=356	SD=	16.356	16.736	19.466	42.228
	Above-20	High SES	M=	59.95	59.84	65.33	185.12
		N=263	SD=	14.025	14.436	20.708	38.006
		TOTAL	M=	61.69	61.55	67.01	190.25
		N=619	SD=	15.469	15.856	20.039	40.697
	Total	Low SES	M=	57.05	59.24	64.11	180.41
		N=303	SD=	16.202	15.177	20.784	39.945
		High SES	M=	53.94	57.12	61.71	172.77
		N=248	SD=	16.394	15.207	21.125	41.312
	Total	TOTAL	M=	55.65	58.29	63.03	176.97
		N=551	SD=	16.347	15.214	20.953	40.707
Low SES		M=	60.25	61.17	66.35	187.77	
N=659		SD=	16.539	16.124	20.174	41.721	
Total	High SES	M=	57.04	58.52	63.57	179.12	
	N=511	SD=	15.500	14.863	20.970	40.085	
	TOTAL	M=	58.85	60.01	65.14	184.00	
	N=1170	SD=	16.166	15.635	20.563	41.221	

**NOTE: SES=Socio-economic status, PI=Peer Influence, PLI= Parental Influence, IC= Institutional Climate, TCI= Total Contextual Influence**

In order to analyze the variance of peer influence, parental influence, institutional climate and total score of contextual influences of the male and female undergraduate students from low and high SES having upto-20 and above-20 years age, the obtained scores were subjected to ANOVA and the comprehensive details of the results have been presented in the Table 4.28.



**TABLE 4.28**

**SUMMARY OF 2X2X2 ANOVA WITH RESPECT TO VARIOUS DIMENSIONS AND TOTAL CONTEXTUAL INFLUENCES IN RELATION TO GENDER, AGE AND SOCIO-ECONOMIC STATUS**

<b>PEER INFLUENCE</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	264.671	264.671	1.058	.304
<b>Age</b>	1	9053.114	9053.114	36.190	.000
<b>SES</b>	1	2197.561	2197.561	8.785	.003
<b>G*A</b>	1	136.062	136.062	.544	.461
<b>G*S</b>	1	904.153	904.153	3.614	.058
<b>A*S</b>	1	32.727	32.727	.131	.718
<b>G*A*S</b>	1	363.106	363.106	1.452	.229
<b>Error</b>	1162	290678.847	250.154		
<b>Total</b>	1170	4357286.000			
<b>PARENTAL INFLUENCE</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	107.166	107.166	.447	.504
<b>Age</b>	1	2456.480	2456.480	10.242	.001
<b>SES</b>	1	1689.482	1689.482	7.044	.008
<b>G*A</b>	1	607.099	607.099	2.531	.112
<b>G*S</b>	1	1330.490	1330.490	5.547	.019
<b>A*S</b>	1	211.481	211.481	.882	.348
<b>G*A*S</b>	1	30.741	30.741	.128	.720
<b>Error</b>	1162	278711.378	239.855		
<b>Total</b>	1170	4499333.000			
<b>INSTITUTIONAL CLIMATE</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	1698.476	1698.476	4.098	.043
<b>Age</b>	1	3114.404	3114.404	7.514	.006
<b>SES</b>	1	1415.238	1415.238	3.414	.065
<b>G*A</b>	1	3166.874	3166.874	7.640	.006
<b>G*S</b>	1	831.915	831.915	2.007	.157
<b>A*S</b>	1	92.149	92.149	.222	.637
<b>G*A*S</b>	1	1002.435	1002.435	2.418	.120
<b>Error</b>	1162	481638.267	414.491		
<b>Total</b>	1170	5458346.000			
<b>TOTAL CONTEXTUAL INFLUENCES</b>					
<b>SOURCE</b>	<b>Df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>	<b>Sig.</b>
<b>Gender</b>	1	4601.369	4601.369	2.826	.093
<b>Age</b>	1	40207.303	40207.303	24.690	.000
<b>SES</b>	1	15775.639	15775.639	9.687	.002
<b>G*A</b>	1	8570.856	8570.856	5.263	.022
<b>G*S</b>	1	9098.862	9098.862	5.587	.018
<b>A*S</b>	1	891.771	891.771	.548	.459
<b>G*A*S</b>	1	3165.307	3165.307	1.944	.164
<b>Error</b>	1162	1892321.994	1628.504		
<b>Total</b>	1170	41596029.000			

**NOTE: G=Gender, A=Age, S=Socio-economic status, SS=Sum of Squares, MS=Mean Square**

F-value at (1, 1162) df= 3.85 (0.05 level); 6.66 (0.01 level)

## **MAIN EFFECTS**

### **GENDER**

Table 4.28 revealed that the F-ratio for the differences in peer influence, parental influence, institutional climate and total contextual influence of male and female undergraduate students has been found to be 1.058, .447, (4.098,  $p < 0.05$ ), 2.826 respectively. The result indicates that undergraduate male and female undergraduate students differ significantly in the scores of institutional climate only but do not differ significantly on peer influence, parental influence, and total contextual influence. Therefore, the data does not provide sufficient evidence to reject the hypothesis 4(a) “There exists no significant difference between male and female undergraduate students in their contextual influences” for peer influence, parental influence and total contextual influences. Meaning thereby undergraduate male and female students differ significantly in ‘institutional climate’ dimension of contextual influences. Further, it is clear from Table 4.27, it was found that male undergraduate students score more (Mean=66.55) as compared to their female undergraduate (Mean=63.68) counterparts on institutional climate. This means that male undergraduate students perceived good atmosphere in college campus as compared to their female counterparts on institutional climate.

### **AGE**

It may be observed in Table 4.28 that F-ratio for differences in peer influence, parental influence, institutional climate and total contextual influences of undergraduate students of two age groups i.e. upto-20 years and above-20 years, came out to be (36.190,  $p < 0.01$ ), (10.242,  $p < 0.01$ ), (7.514,  $p < 0.01$ ), and (24.690,  $p < 0.01$ ), which are found significant at 0.01 level of confidence. Thus, the data provides sufficient evidence to reject the hypothesis 4(b) “There exists no significant difference in contextual influences of undergraduate students on the basis of age”. This indicates that two groups of undergraduate students differ significantly on their scores of peer influence, parental influence, institutional climate and total contextual influences.

It is obvious from Table 4.27 that undergraduate students upto-20 years age score more on peer influence (Mean=61.69), parental influence (Mean=61.55), institutional climate (Mean=67.01) and total contextual influence (Mean=190.25) as compared to above-20 years undergraduate students on peer influence (Mean=55.65), parental influence (Mean=58.29), institutional climate (Mean=63.03) and contextual

influences (Mean=176.97). This indicates that undergraduate students having younger age are more influenced by the behaviour of others as compared to older age undergraduate students i.e. above 20-years counterparts.

## **SOCIO-ECONOMIC STATUS**

It is clear from the Table 4.28 that the F-ratio for the differences in peer influence (F-ratio = 8.785,  $p < 0.05$ ), parental influence (F-ratio = 7.044,  $p < 0.05$ ), institutional climate (F-ratio = 3.414) and total contextual influences (F-ratio = 9.687,  $p < 0.01$ ) of undergraduate students. This indicates that undergraduate students from low and high socio-economic status differ significantly on their scores of peer influence, parental influence and total scores of contextual influence. All the F-ratios are significant except for 'institutional climate'; which denotes that there is no significant difference in institutional climate between low and high socio-economic status of undergraduate students. Thus, the data provides sufficient evidence to reject the hypothesis 4(c) "There exists no significant difference between undergraduate students from low and high socio-economic status on their contextual influences" for peer influence, parental influence and total score of contextual influences.

Table 4.27 indicates that undergraduate students from low socio-economic status (Mean=60.25) had more score as compared to undergraduate students from high socio-economic status (Mean=57.04) on peer influence. While undergraduate students from low socio-economic status score more (Mean=61.17) than undergraduate students from high socio-economic status (Mean=58.52) on parental influence. In total contextual influences, low socio-economic status undergraduate students score more (Mean=187.77) than undergraduate students from high socio-economic status (Mean=179.12). Furthermore, it can be concluded that undergraduate students coming from families of low socio-economic status perceive more peer, parental and contextual influences as compared to undergraduate students from high socio-economic status.

## **TWO ORDER INTERACTION**

### **Gender X Age**

It is clear from the Table 4.28 that the F-ratios for the interaction between gender and age of the undergraduate students on the scores of peer influence, parental influence, institutional climate and total contextual influences has been found to be

.544, 2.531, (7.640,  $p < 0.01$ ) and (5.263,  $p < 0.05$ ) level of confidence. This result indicates that two groups of undergraduate students as a result of interaction of gender and age do not differ significantly on their scores of ‘peer influence’, ‘parental influence’ but differ significantly on ‘institutional climate’ and ‘total contextual influence’. Thus, the data provides sufficient evidence to reject the hypothesis 4(d) “There is no significant interaction effect of gender and age on contextual influences of undergraduate students” for institutional climate and total contextual influences. Meaning thereby that undergraduate male and female students from two age groups i.e. upto-20 and above-20 years are same in their peer influence and parental influence. However, the interaction of gender and age are significant in institutional climate and total contextual influences.

However, F-value for interaction effect of gender and age on dimension ‘institutional climate’ and ‘total contextual influences’ has been found significant at 0.05 level of confidence. To proceed for further analysis, the significant difference between various groups; t-test has been applied and obtained results are presented in the Table 4.29 and 4.30.

**TABLE 4.29**  
**‘t’-VALUES FOR THE GENDER X AGE IN ‘INSTITUTIONAL CLIMATE’**  
**DIMENSION OF CONTEXTUAL INFLUENCES**

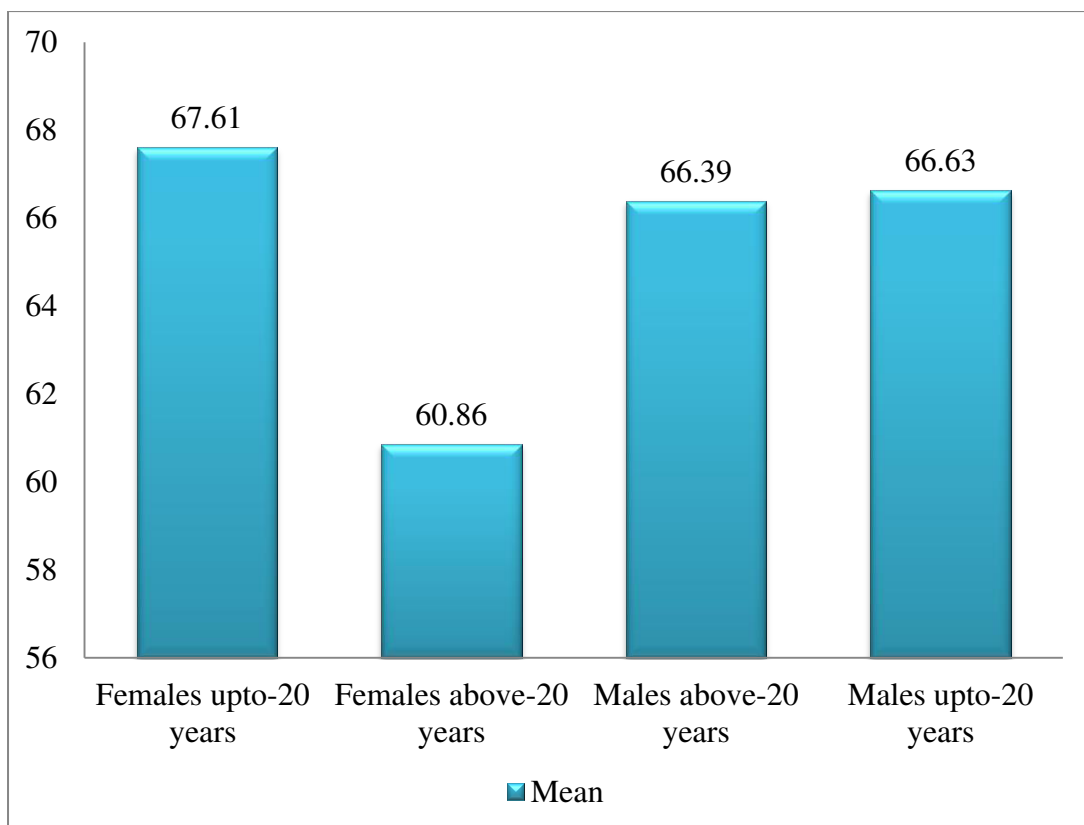
Groups		Parameter	Groups		Parameter	t-value
Males	Upto-20 years	M= 66.63 SD= 18.95 N= 378	Males	above-20 years	M= 66.39 SD= 19.18 N= 216	0.147
Males	Upto-20 years	M= 66.63 SD= 18.95 N= 378	Females	upto-20 years	M= 67.61 SD= 21.65 N= 241	0.576
Males	Upto-20 years	M= 66.63 SD= 18.95 N= 378	Females	above-20 years	M= 60.86 SD= 21.77 N= 335	3.752**
Females	upto-20 years	M= 67.61 SD= 21.65 N= 241	Males	above-20 years	M= 66.39 SD= 19.18 N= 216	.639
Females	upto-20 years	M= 67.61 SD= 21.65 N= 241	Females	above-20 years	M= 60.86 SD= 21.77 N= 335	3.683**
Males	above-20 years	M= 66.39 SD= 19.18 N= 216	Females	above-20 years	M= 60.86 SD= 21.77 N= 335	3.132**

\*/\*\*Significant at 0.05 and 0.01 level of confidence

Table 4.29 indicated that the t-value for 3 sub-groups was found to be significant at 0.01 or 0.05 level of confidence. From means analysis, in the Table 4.27, it is clear that male undergraduate students upto-20 years score more (Mean=66.63) as compared to female undergraduate students above-20 years (Mean=60.86) on 'institutional climate' dimension of contextual influence. Similarly, female undergraduate students upto-20 years score more (Mean=67.61) as compared to female undergraduate students above-20 years (Mean=60.86). Moreover, male undergraduate students above-20 years score more (Mean=66.39) as compared to female undergraduate students above-20 years (Mean=60.86) on 'institutional climate' dimension of contextual influence. Mean scores on the 'institutional climate' dimension of contextual influences is shown in below given Figure 4.20.

**FIGURE 4.20**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN 'INSTITUTIONAL CLIMATE' DIMENSION OF CONTEXTUAL INFLUENCES**



**TABLE 4.30**  
**SUMMARY OF 't'-VALUES FOR THE SUB GROUPS IN RELATION TO**  
**TOTAL SCORE OF CONTEXTUAL INFLUENCES**

Groups		Parameter	Groups		Parameter	t-value
Males	Upto-20 years	M= 189.41 SD= 36.36 N= 378	Males	above-20 years	M= 182.29 SD= 38.03 N= 216	2.23**
Males	Upto-20 years	M= 189.41 SD= 36.36 N= 378	Females	upto-20 years	M= 191.56 SD= 46.73 N= 241	0.607
Males	Upto-20 years	M= 189.41 SD= 36.36 N= 378	Females	above-20 years	M= 173.54 SD= 42.04 N= 335	5.358**
Females	upto-20 years	M= 191.56 SD= 46.73 N= 241	Males	above-20 years	M= 182.29 SD= 38.03 N= 216	2.335*
Females	upto-20 years	M= 191.56 SD= 46.73 N= 241	Females	above-20 years	M= 173.54 SD= 42.04 N= 335	4.759**
Males	above-20 years	M= 182.29 SD= 38.03 N= 216	Females	above-20 years	M= 173.54 SD= 42.04 N= 335	2.529*

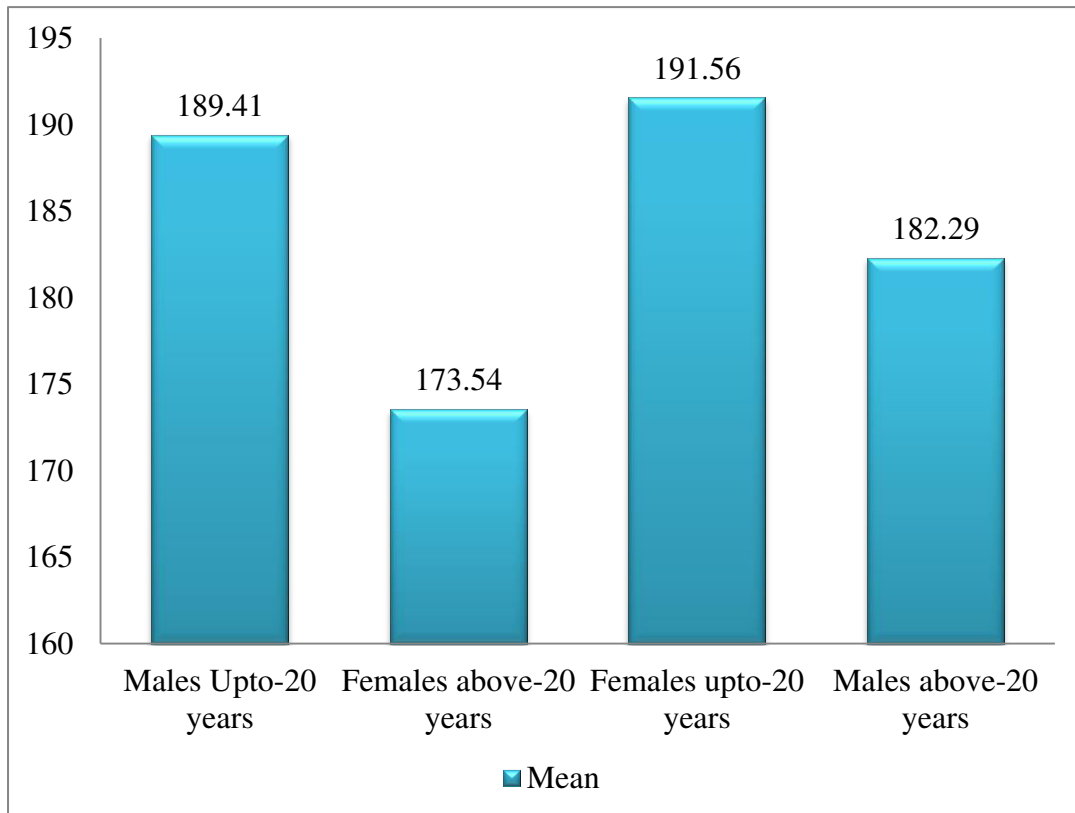
\*/\*\*Significant at 0.05 and 0.01 level of confidence

Table 4.30 indicated that the t-values for 5 sub-groups was found to be significant at the 0.01 or 0.05 level of confidence. From means analysis, in the Table 4.27, it is clear that male undergraduate students upto-20 years score more (Mean=189.41) as compared to male undergraduate students above-20 years (Mean=182.29) and female undergraduate students above-20 years (Mean=173.54). While as female undergraduate students upto-20 years score more (Mean=191.56) as compared to male undergraduate students above-20 years (Mean=182.29) and female undergraduate students above-20 years (Mean=173.54). In addition, male undergraduate students above-20 years score more (Mean=182.29) as compared to

female undergraduate students above-20 years (Mean=173.54) on total contextual influences. Mean scores on the contextual influences is shown in Figure 4.21.

**FIGURE 4.21**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN THE TOTAL SCORES OF CONTEXTUAL INFLUENCES**



**Gender X Socio-economic Status**

Table 4.28 revealed that the F-ratio for the interaction between gender and socio-economic status of undergraduate students on peer influence, parental influence, institutional climate and total contextual influences came out to be 3.614, (5.547,  $p < 0.05$ ), 2.007, (5.587,  $p < 0.05$ ) level of confidence. The result indicates that there is no significant main effect of gender and socio-economic status on peer influence and institutional climate. However, there is significant interaction effect of gender and socio-economic status on parental influence and total contextual influences of undergraduate students. Therefore, the data provides sufficient evidence to reject the hypothesis 4(e) “There is no significant interaction effect of gender and socio-economic status on contextual influences of undergraduate students” for parental influence and total contextual influences.

However, F-value for interaction effect of gender and socio-economic status on ‘parental influence’ dimension and total contextual influences has been found significant at 0.05 level of confidence. To proceed for further analysis the significant difference between various groups; t-test has been applied on parental influence and contextual influences and obtained results are presented in the Table 4.31 and 4.32.

**TABLE 4.31**  
**‘t’-VALUES FOR THE GENDER X AGE IN RESPECT OF ‘PARENTAL INFLUENCE’ DIMENSION OF CONTEXTUAL INFLUENCES**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 60.74 SD= 15.27 N= 330	Females from Low SES	M= 61.60 SD= 16.94 N= 329	.684
Males from Low SES	M= 60.74 SD= 15.27 N= 330	Females from High SES	M= 56.82 SD= 15.99 N= 247	2.97**
Males from Low SES	M= 60.74 SD= 15.27 N= 330	Males from High SES	M= 60.10 SD= 13.55 N= 264	.541
Females from Low SES	M= 61.60 SD= 16.94 N= 329	Females from High SES	M= 56.82 SD= 15.99 N= 247	3.461**
Males from High SES	M= 60.10 SD= 13.55 N= 264	Females from High SES	M= 56.82 SD= 15.99 N= 247	2.493*
Males from High SES	M= 60.10 SD= 13.55 N= 264	Females from Low SES	M= 61.60 SD= 16.94 N= 329	1.198

\*/\*\*Significant at 0.05 and 0.01 level of confidence

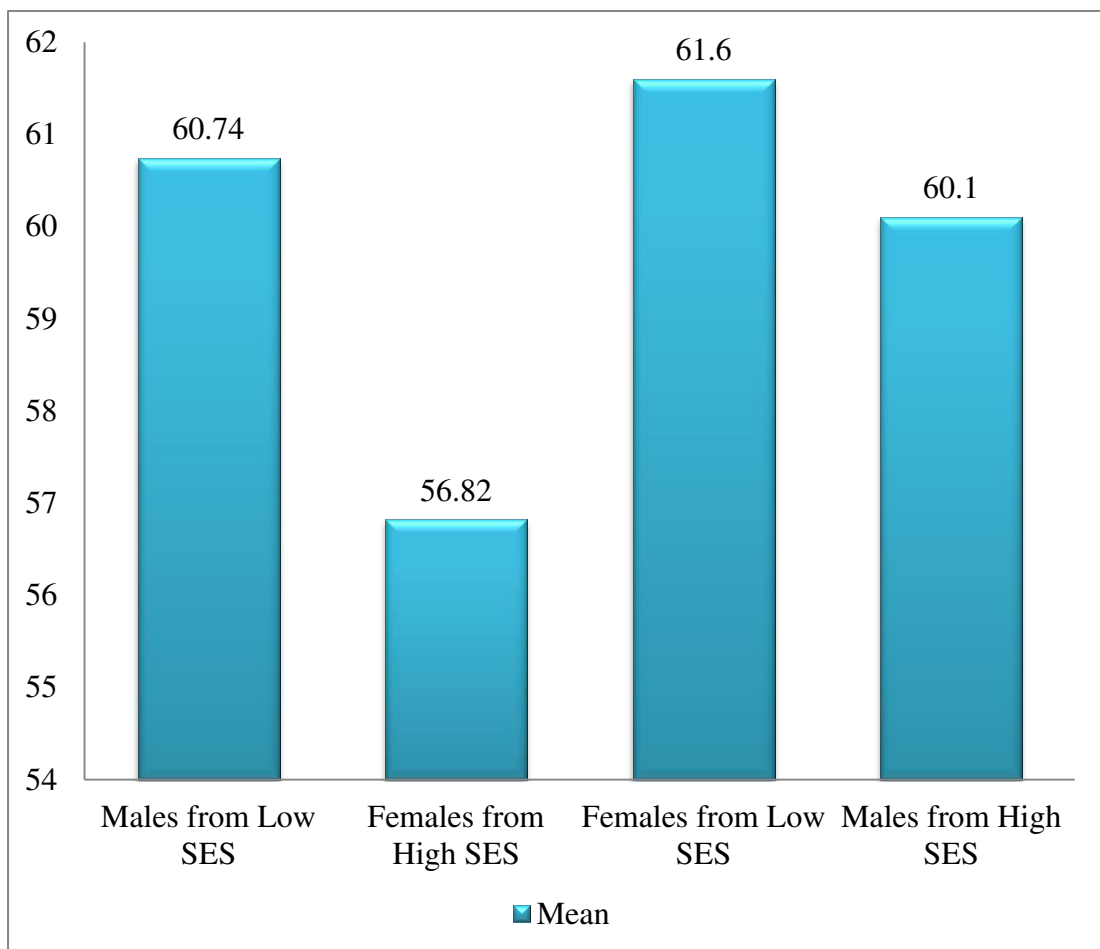
Table 4.31 indicated that the t-values for 3 sub-groups was found to be significant at 0.01 or 0.05 level of confidence. From means analysis, in the Table 4.27, it is clear that male undergraduate students from low SES score more (Mean=60.74) as compared to female undergraduate students from high SES (Mean=56.82) in ‘parental influence’ dimension of contextual influences. Similarly,



female undergraduate students from low SES score more (Mean=61.60) as compared to female undergraduate students from high SES (Mean=56.82). Moreover, male undergraduate students from high SES score more (Mean=60.10) as compared to female undergraduate students from high SES (Mean=56.82). Mean scores on the 'parental influence' dimension of contextual influences is shown in below given Figure 4.22.

**FIGURE 4.22**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN 'PARENTAL INFLUENCE' OF CONTEXTUAL INFLUENCES**



**TABLE 4.32****‘t’-VALUES FOR THE GENDER X SES IN RELATION TO TOTAL SCORE OF CONTEXTUAL INFLUENCES**

<b>Groups</b>	<b>Parameter</b>	<b>Groups</b>	<b>Parameter</b>	<b>t-value</b>
Males from Low SES	M= 188.32 SD= 37.86 N= 330	Females from Low SES	M= 187.22 SD= 45.31 N= 329	.338
Males from Low SES	M= 188.32 SD= 37.86 N= 330	Females from High SES	M= 172.90 SD= 43.13 N= 247	4.475**
Males from Low SES	M= 188.32 SD= 37.86 N= 330	Males from High SES	M= 184.95 SD= 36.12 N= 264	1.106
Females from Low SES	M= 187.22 SD= 45.31 N= 329	Females from High SES	M= 172.90 SD= 43.13 N= 247	3.859**
Males from High SES	M= 184.95 SD= 36.12 N= 264	Females from High SES	M= 172.90 SD= 43.13 N= 247	3.412**
Males from High SES	M= 184.95 SD= 36.12 N= 264	Females from Low SES	M= 187.22 SD= 45.31 N= 329	.679

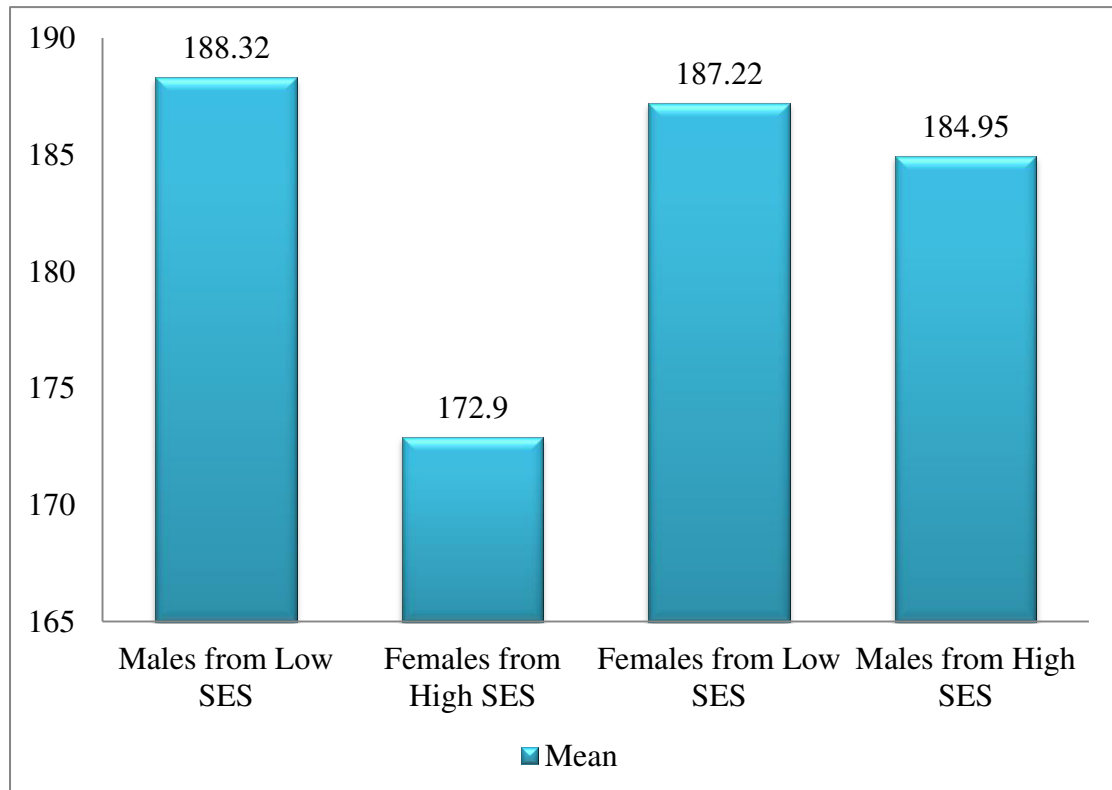
\*/\*\*Significant at 0.05 and 0.01 level of confidence

Table 4.32 indicated that the t-values for 3 sub-groups was found to be significant at 0.05 or 0.01 level of confidence. From mean scores analysis, in the Table 4.27, it is clear that male undergraduate students from low SES score more (Mean=188.32) as compared to female undergraduate students from high SES (Mean=172.90). Conversely, female undergraduate students from low SES score more (Mean=187.22) than female undergraduate students from high SES (Mean=172.90). In addition, male undergraduate students from high SES score more (Mean=184.95) as compared to female undergraduate students from high SES (Mean=172.90) on

contextual influences. Mean scores on the contextual influences is shown in below given Figure 4.23.

**FIGURE 4.23**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN THE TOTAL SCORES OF CONTEXTUAL INFLUENCES**



**Age X Socio-economic Status**

Table 4.27 revealed that the F-ratio for the interaction between age and socio-economic status of undergraduate students on peer influence, parental influence, institutional climate, and total contextual influences has been found to be .131, .882, .222, .548 respectively. All F-ratios are insignificant even at 0.05 level of confidence. So, the results indicate that the main effects i.e. age and socio-economic status functions independently. Therefore, the data does not provide sufficient evidence to reject the hypothesis 4(f) “There is no significant interaction effect of age and socio-economic status on contextual influences of undergraduate students”. Meaning thereby there is no significant interaction effect of age and SES on contextual influences of undergraduate students.

### **THREE ORDER INTERACTION**

#### **Gender X Age X Socio-economic Status**

Table 4.27 displays that F-ratios for the interaction between gender, age and socio-economic status for peer influence, parental influence, institutional climate, and total contextual influences are 1.452, .128, 2.418 and 1.944 respectively, which are found insignificant even at the 0.05 level of confidence. This indicates that undergraduate students on the scores of 'peer influence', 'parental influence', 'institutional climate', and 'total contextual influences' as a result of interaction of gender, age and socio-economic status for different sub groups do not differ significantly. Thus, the data does not provide sufficient evidence to reject the hypothesis 4(g) "There is no significant interaction effect of gender, age and socio-economic status on the scores of contextual influences of undergraduate students". Meaning thereby sub-groups of undergraduate students as a result of interaction of gender, age and socio-economic status do not differ significantly in contextual influences.

### **DISCUSSION ON RESULTS**

The observation of the results suggests that there is a significant difference between male and female undergraduate students on institutional climate dimension of contextual influences. Female students perceived low institutional climate as compared to their male counterparts. However, no significant difference was found between male and female undergraduate students on peer influence. This result is consistent with the findings of prior researches (Deepika & Prema, 2017; Olasehinde & Olatoye, 2014; Oloyede & Olatoye, 2005).

Significant age difference was found in peer influence, parental influence, institutional climate and contextual influences of undergraduate students. The students having young age perceive more influence from peers, parents, institution and overall contextual effects as compared to their older counterparts. This results got tremendous support from Steinberg & Monahan (2007) noted that peer influence increases in early years of age than later years.

Undergraduate students differ significantly on peer influence, parental influence and total contextual influence with respect to socio-economic status. The low SES undergraduate students perceive more peer, parental and total contextual

influences. The two order interaction between gender and age was found significant for institutional climate dimension of contextual influence which means that male and female students from two age groups vary in their institutional climate. Similarly, a significant interaction effect was found between gender and SES on parental influence and total contextual influence of undergraduate students. It means that undergraduate male and female students from low and high SES groups are differing in their parental influence and total contextual influences. The three order interaction between gender, age and socio-economic status was not found to be significant in peer influence, parental influence, institutional climate and total contextual influences of undergraduate students.

#### **4.3.5. ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF ACADEMIC DISHONESTY OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

As per the sample stratification, six regions of Jammu and Kashmir was taken in order to get meaningful picture of multi-campus investigation. One-way analysis of variance (ANOVA) was performed using F-test. Descriptive statistics was calculated for academic dishonesty and the results are presented in the Table 4.33.

**TABLE 4.33**  
**DESCRIPTIVE STATISTICS OF ACADEMIC DISHONESTY OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

<b>REGION</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
South Kashmir	195	54.68	11.624	.832
North Kashmir	195	55.31	10.649	.763
Central Kashmir	195	49.53	9.078	.650
Jammu region	195	54.70	10.194	.730
Chenab valley	195	55.18	10.771	.771
Peer Panjal range	195	66.37	4.477	.321
Total	1170	55.96	10.974	.321

As there is one independent variable (region of college campuses) encompassing six groups as mentioned above in the Table 4.33. Therefore, One-Way ANOVA was applied to explore the significant differences and the results are presented in the table 4.34.

**TABLE 4.34**  
**ONE-WAY ANOVA WITH RESPECT TO ACADEMIC DISHONESTY OF**  
**UNDERGRADUATE STUDENTS IN RELATION TO REGION OF COLLEGE**  
**CAMPUSES**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	30032.927	5	6006.585	63.126	.000
Within Groups	110756.492	1164	95.152		
Total	140789.420	1169			

An examination of the Table 4.34 depicts that academic dishonesty at different regions varied significantly from one another clearly demonstrating a significant effect of region of college campuses on the academic dishonesty of undergraduate students with an F-value of 63.126, which is statistically significant at .01 level of confidence.

As a significant F-value is obtained from the one-way analysis of variance, it shows only that the mean scores are not all equal. To explore the significant differences among the six groups compared or to determine which groups differ significantly from one another, Tukey's Post-Hoc HSD test was applied among the groups and obtained results are presented in the Table 4.35.

**TABLE 4.35**  
**SUMMARY OF TUKEY'S POST-HOC HSD TEST WITH RESPECT TO**  
**ACADEMIC DISHONESTY OF UNDERGRADUATE STUDENTS IN**  
**VARIOUS REGIONS OF JAMMU AND KASHMIR**

(I) Regions	(J) Regions	Mean Difference (I-J)	Std. Error	Sig.
SK	NK	-.631	.988	.988
SK	CK	5.144*	.988	.000
SK	JR	-.026	.988	1.000
SK	CV	-.508	.988	.996
SK	PR	-11.697*	.988	.000
NK	CK	5.774*	.988	.000
NK	JR	.605	.988	.990
NK	CV	.123	.988	1.000
NK	PR	-11.067*	.988	.000
CK	JR	-5.169*	.988	.000
CK	CV	-5.651*	.988	.000
CK	PR	-16.841*	.988	.000
JR	CV	-.482	.988	.997
JR	PR	-11.672*	.988	.000
PR	CV	11.190*	.988	.000

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range

An examination of the Table 4.35 reveals that the p-value of mean difference between undergraduate students of south Kashmir and North Kashmir ( $p=.988$ ) is found insignificant at 0.05 level of confidence for academic dishonesty. While as, mean difference between undergraduate students of South Kashmir and Central Kashmir ( $p=.000$ ) is found significant at 0.01 level of confidence for academic dishonesty. Based on the mean analysis, the undergraduate students from south Kashmir had score more (Mean=54.68) as compared to undergraduate students from central Kashmir (Mean=49.53).

From the analysis it has come to fore that undergraduate students of South Kashmir do not differ significantly in their academic dishonesty from students of Jammu region ( $p=1.000$ ). On the other hand, undergraduate students of South Kashmir do not differ significantly in their academic dishonesty as compared to students of Chenab valley ( $p=.996$ ). From the Table 4.35, it is clear that undergraduate students from South Kashmir and Peer Panjal range ( $p=0.000$ ) differ significantly in their academic dishonesty. Based on mean analysis, the undergraduate students of Peer Panjal range (Mean=66.37) are more involved in academically dishonest practices as compared to undergraduate students of South Kashmir (Mean=54.68). Conversely, students from North Kashmir and Central Kashmir ( $p=.000$ ) differ significantly in their academic dishonesty. Based on mean analysis, the undergraduate students from North Kashmir (Mean=55.31) are more involved in academically dishonest practices as compared to students of central Kashmir (Mean=49.53).

The results further revealed that there is no significant difference between undergraduate students of North Kashmir and Jammu region ( $p=.990$ ) in their academic dishonesty. Similarly, undergraduate students of North Kashmir and Chenab valley ( $p=1.000$ ) do not differ significantly in their academic dishonesty. Table 4.35 further reveals that p-value is less than 0.01 for student performance of dishonest academic acts between undergraduate students of North Kashmir and Peer Panjal Range ( $p=.000$ ). Based on mean analysis, the undergraduate students from Peer Panjal Range (Mean=66.37) are more engaged in academically dishonest practices as compared to students of North Kashmir (Mean=55.31).

Similarly, it was concluded that there is a significant difference between undergraduate students of Central Kashmir and Jammu region ( $p=.000$ ) in their

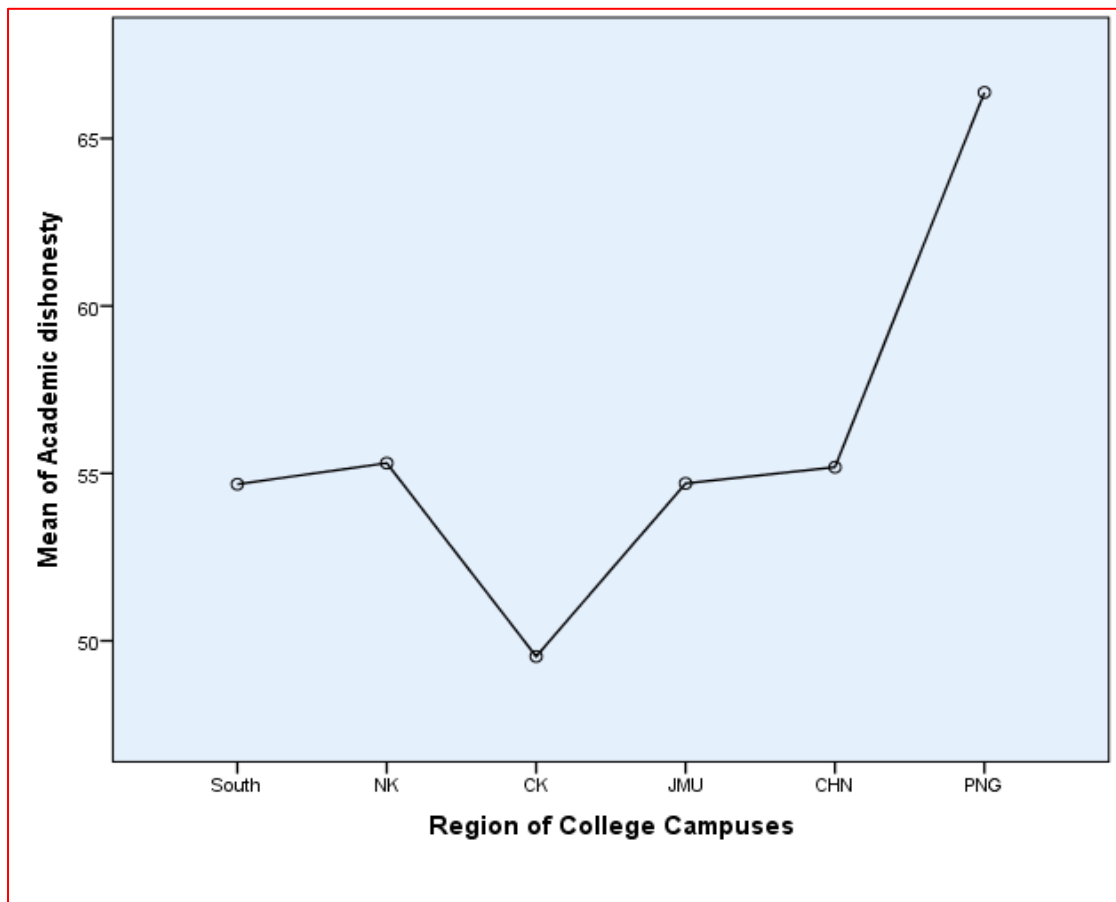
academic dishonesty. Based on mean analysis, the undergraduate students from Jammu region (Mean=54.70) are more engaged in academically dishonest practices as compared to students of Central Kashmir (Mean=49.53). It was also exposed that there exists significant difference in student engagement of academically dishonest practices between undergraduate students from Central Kashmir and Chenab valley ( $p=.000$ ). Based on mean analysis, students of Chenab valley score more (Mean=55.18) as compared to students of Central Kashmir (Mean=49.53).

Since  $p$ -value is less than 0.01 and hence it was concluded that there is a significant difference between undergraduate students of central Kashmir and Peer Panjal range in their academic dishonesty. Based on mean analysis, students of Peer Panjal range (Mean=66.37) score more as compared to central Kashmir (Mean=49.53). However, undergraduate students from Jammu region and Chenab valley ( $p=.997$ ) do not differ significantly at 0.05 level of confidence for academic dishonesty. On the other hand, students from Jammu region and Peer Panjal range ( $p=.000$ ) differ significantly in their academic dishonesty. Based on mean analysis, students of Peer Panjal range score more (mean=66.37) as compared to students of Jammu region (Mean=54.70).

The results further revealed that there is a significant difference between students of Peer Panjal range and Chenab valley ( $p=.000$ ) with respect to the involvement of dishonest academic practices. Based on mean analysis, students of Peer Panjal range score more (Mean=66.37) as compared to students of Chenab valley (Mean=55.18) in their academic dishonesty. Therefore in the light of post-hoc analysis the hypothesis 5(a) “There exists no significant difference in academic dishonesty of undergraduate students on the basis of region of college campuses” is partially accepted and partially rejected. In order to get better understanding regarding differences of groups, mean scores of the region of college campuses on academic dishonesty is shown below in Figure 4.24.



**FIGURE 4.24**  
**MEAN SCORES OF UNDERGRADUATE STUDENTS OF VARIOUS**  
**REGIONS OF COLLEGE CAMPUSES ON ACADEMIC DISHONESTY**



### **DISCUSSION ON RESULTS**

The observation of the results suggests that there is a significant difference in engagement of academic dishonesty among students of different regions of college campuses in Jammu and Kashmir. The statistical examination revealed that students of Peer Panjal range and Chenab valley are highly involved in academically dishonest practices as compared to other regions of Jammu and Kashmir. Having students more attitudes towards involvement of dishonest academic practices may be due to the fact that Chenab valley, peer Panjal range and north Kashmir are highly hilly areas and fewer opportunities are available for students. The students of these areas have not sufficient resources in life which might lead students to resort dishonest academic practices. When sufficient necessities are not available it would develop social anxiety among students. Conversely, social anxiety is also linked with academically dishonest practices (Wowra, 2007). Yu et al. (2009) presented an extensive summary and found

that student family financial background is significantly linked with academic dishonesty. Similarly, other reasons may be personal crisis, lack of resources, lack of deterrence, time management problems, lack of respect for authority, aspiration for jobs, bulky classes, cheating culture accepted by the community, and academic procrastination. These explanations are in line with previous studies (Lambert et al., 2003; Liesera et al., 2015; Park, 2003; Pullen et al., 2000; Patrzek et al., 2014). Conversely, prior researches have exposed that students from different areas tend to have diverse attitudes toward academic dishonesty (Chapman & Lupton 2004; Grimes 2004; Stephens et al., 2010). Stephens et al. (2010) also revealed that both the importance of educational performance and the frequency of academic dishonesty behavior are exaggerated by culture and that culture and the prominence of academic performance have a joint effect on students' perceptions of academic dishonesty and on the frequency with which they engage in academic dishonesty.

#### **4.3.6. ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF ANOMIE OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES.**

As per the sample stratification six regions of Jammu and Kashmir were taken in order to get meaningful picture of multi-campus investigation. One-way analysis of variance (ANOVA) was performed using F-test. Descriptive statistics was calculated for anomie and the results are presented in the Table 4.36.

**TABLE 4.36**  
**DESCRIPTIVE STATISTICS OF ANOMIE OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

<b>REGION</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
South Kashmir	195	68.08	8.803	.630
North Kashmir	195	65.52	7.985	.572
Central Kashmir	195	64.25	8.043	.576
Jammu region	195	64.91	8.579	.614
Chenab valley	195	68.95	9.350	.670
Peer Panjal Range	195	81.13	5.996	.429
<b>Total</b>	<b>1170</b>	<b>68.81</b>	<b>10.004</b>	<b>.292</b>

As there is one independent variable (region of college campuses) encompassing six groups as mentioned above in the Table 4.36. Therefore, One-Way ANOVA was applied to explore the significant differences and the results are presented in the table 4.37.

**TABLE 4.37**  
**SUMMARY OF ONE-WAY ANOVA WITH RESPECT TO ANOMIE OF**  
**UNDERGRADUATE STUDENTS IN RELATION TO REGION OF COLLEGE**  
**CAMPUSES**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	38832.599	5	7766.520	115.648	.000
Within Groups	78170.359	1164	67.157		
Total	117002.958	1169			

An examination of the Table 4.37 depicts that the anomie at different regions varied significantly from one another clearly demonstrating a significant effect of region of college campuses on the anomie of undergraduate students with an F-value of 115.648, which is statistically significant at .01 level of confidence.

As a significant F-value is obtained from the one-way analysis of variance, it shows only that the mean scores are not all equal. To explore the significant differences among the six groups compared or to determine which groups differ significantly from one another, Tukey's Post-Hoc HSD test was applied between the groups and obtained results are presented in the Table 4.38.

**TABLE 4.38**  
**SUMMARY OF TUKEY'S POST-HOC HSD TEST WITH RESPECT TO**  
**ANOMIE OF UNDERGRADUATE STUDENTS IN VARIOUS REGIONS OF**  
**JAMMU AND KASHMIR**

<b>(I) Regions</b>	<b>(J) Regions</b>	<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>Sig.</b>
SK	NK	2.564	.830	.025
SK	CK	3.836	.830	.000
SK	JR	3.169	.830	.002
SK	CV	.867	.830	.903
SK	PR	13.046	.830	.000
NK	CK	1.272	.830	.643
NK	JR	.605	.830	.978
NK	CV	3.431	.830	.001
NK	PR	15.610	.830	.000
CK	JR	.667	.830	.967
CK	CV	4.703	.830	.000
CK	PR	16.882	.830	.000
JR	CV	4.036	.830	.000
JR	PR	16.215	.830	.000
PR	CV	12.179	.830	.000

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range

An examination of the Table 4.38 reveals that the p-value of mean difference between undergraduate students of south Kashmir and North Kashmir ( $p=.025$ ) is found significant at 0.05 level of confidence for anomie. Based on the mean analysis, the undergraduate students of south Kashmir score more (Mean=68.08) as compared to undergraduate students of north Kashmir (Mean=65.52). While as, significant difference between undergraduate students of south Kashmir and Central Kashmir ( $p=.000$ ) was found at 0.01 level of confidence for anomie. Based on mean analysis, undergraduate students of south Kashmir score more (Mean=68.08) as compared to undergraduate students of Central Kashmir (Mean=64.25).

From the analysis it was found that undergraduate students of south Kashmir differ significantly in their perception of anomie from students of Jammu region ( $p=0.002$ ). Based on mean analysis, the undergraduate students of south Kashmir perceive more anomie (Mean=68.08) as compared to students of Jammu region (Mean=64.91). On the other hand, undergraduate students of South Kashmir and Chenab valley ( $p=.903$ ) didn't differ significantly in their perception of anomie.

From the Table 4.38 it is clear that undergraduate students of south Kashmir and Peer Panjal range ( $p=.000$ ) differ significantly in their feeling of anomie. Based on mean analysis, the undergraduate students of Peer Panjal range score more anomie (Mean=81.13) as compared to students of South Kashmir (Mean=68.08). However, undergraduate students of north Kashmir and Central Kashmir ( $p=.643$ ) didn't differ significantly in their perception of anomie. Similarly, no significance difference was found between undergraduate students of north Kashmir and Jammu region ( $p=.978$ ) in their anomie.

The results further revealed that undergraduate students of north Kashmir and Chenab valley ( $p=.001$ ) differ significantly in their anomie. Based on mean analysis, the undergraduate students of Chenab valley perceive more anomie (Mean=68.95) as compared to students of north Kashmir (Mean=65.52). Table 4.38 further reveals that the p-value is less than 0.01 for perception of anomie between undergraduate students of north Kashmir and Peer Panjal range ( $p=.000$ ). Based on mean analysis, the undergraduate students of Peer Panjal range score more anomie (Mean=81.13) as compared to students of north Kashmir (Mean=65.52). Whereas, it is conclude that there is no significant difference between undergraduate students of Central Kashmir and Jammu region ( $p=.967$ ) in their anomie.

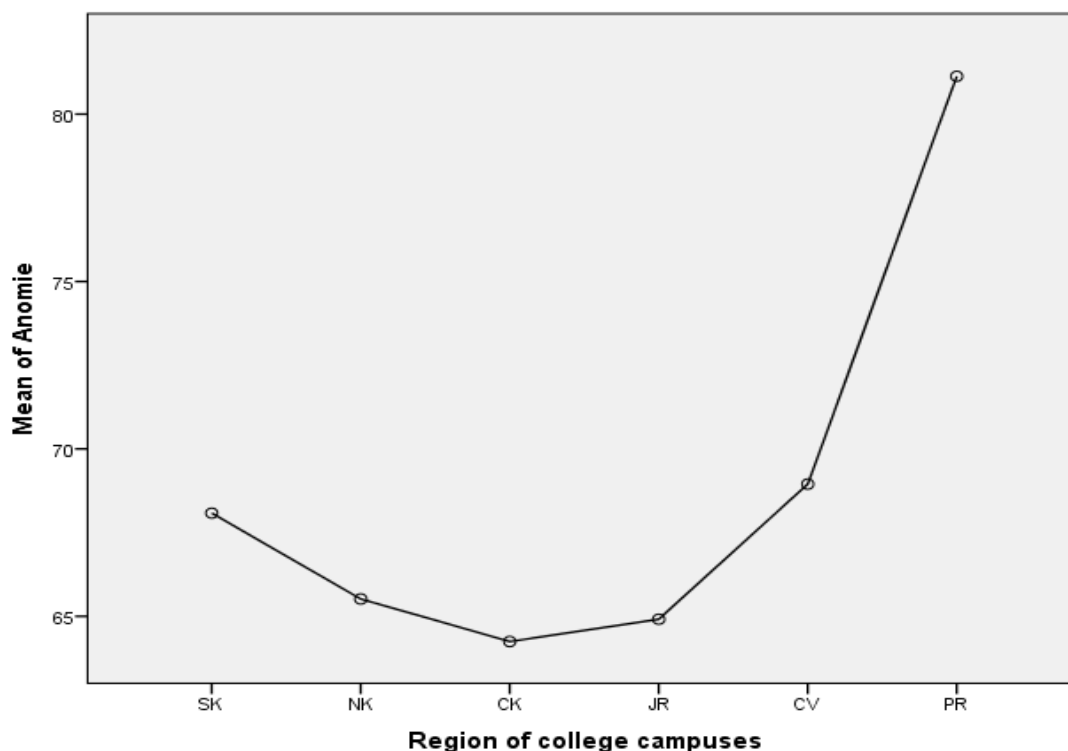
Further, significant difference was found between students of central Kashmir and Chenab valley ( $p=.000$ ). Based on mean analysis, the undergraduate students of Chenab valley score more (Mean=68.95) as compared to students of central Kashmir (Mean=64.25). It is also revealed that the  $p$ -value is less than 0.01 with regard to perception of anomie between undergraduate students of Central Kashmir and Peer Panjal range ( $p=.000$ ) differ significantly on anomie. Based on mean analysis, students of peer Panjal range score more (Mean=81.13) as compared to students of Central Kashmir (Mean=64.25).

Since  $p=.000$ , hence it was concluded that there is a significant difference between undergraduate students of Jammu region and Chenab valley in their anomie. Based on mean analysis, the undergraduate students of Chenab valley score more (Mean=68.95) as compared to Jammu region (Mean=64.91). Similarly, students from Jammu region and Peer Panjal range ( $p=.000$ ) differ significantly in their anomie. Based on mean score, students of Peer Panjal range score more (Mean=81.13) as compared to students of Jammu region (Mean=64.91).

The results further reveals that there is a significant difference between students of Peer Panjal range and Chenab valley ( $p=.000$ ) with respect to their perception of anomie. Based on mean score, undergraduate students of Peer Panjal range score more (Mean = 81.13) as compared to undergraduate students of Chenab valley (Mean=68.95) in their anomie. Therefore in the light of post-hoc analysis the hypothesis, 5(b) “There exists no significant difference in anomie of undergraduate students on the basis of region of college campuses” is partially accepted and partially rejected. In order to get better understanding regarding differences of groups, mean scores of the region of college campuses on anomie is shown in below given Figure 4.25.

**FIGURE 4.25**

**MEAN SCORES OF UNDERGRADUATE STUDENTS IN VARIOUS  
REGIONS OF COLLEGE CAMPUSES ON ANOMIE**



**DISCUSSION ON RESULTS**

The observation of the results suggested that there exists a significant difference among students of different regions of Jammu and Kashmir in their perception of anomie. The students perceive more anomie in some regions are due to some possible reasons like low habitual patterns of behavior, emotion and thought of people that separate an individual from others i.e. people of one region is different from other. Other reasons may be distrust i.e. lack of trust in higher authority, meaningless life, chaos, confusion regarding rules, moral disruption, low life satisfaction and interpersonal alienation aspects lead students towards higher anomie. Because in anomie condition people feel low standard of life and it mainly undermines wellbeing and life satisfaction (Lachman & Weaver, 1998) and it also decreases happiness (Brockmann, Delhey, Welzel, Yuan, 2009). This is because students feel hopeless and helpless in their capability to work toward their preferred goals (Elgar, Davis, Wohl, Trites, Zelenski, & Martin, 2011). Similarly, it may be due to radical and undesirable change expectations in societies (Reimanis, 1967), and

higher among lower socioeconomic classes (Koenig et al., 1981). Recently, Teymoori et al. (2016) suggested that “psychological effect of anomie is the failure to satisfy four essential human needs comprising a need for a meaningful life, a need for self-esteem, a need to belong, and a need to have a sense of personal and collective control”. To conclude, anomie feeling of students would develop elements like anxiety-isolation-purposelessness in contemporary civilized society as it is for the intrinsic insecurity of a social life.

#### **4.3.7. SUMMARY OF ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

As per the sample stratification six regions of Jammu and Kashmir were taken in order to get meaningful picture of multicampus investigation. One-way analysis of variance (ANOVA) was applied using F-test. Descriptive statistics was calculated for personality hardiness and the results are presented in the Table 4.39.

**TABLE 4.39**  
**DESCRIPTIVE STATISTICS OF PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
SK	195	107.00	7.541	.540
NK	195	100.62	8.117	.581
CK	195	106.72	8.171	.585
JR	195	105.98	8.284	.593
CV	195	104.07	12.408	.889
PR	195	82.71	13.223	.947
Total	1170	101.18	13.052	.382

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range.

As there is one independent variable (region of college campuses) encompassing six groups as mentioned above in the Table 4.39. Therefore, One-Way ANOVA was applied to explore the significant differences and the results are presented in the table 4.40.

**TABLE 4.40**  
**SUMMARY OF ONE-WAY ANOVA WITH RESPECT TO PERSONALITY**  
**HARDINESS OF UNDERGRADUATE STUDENTS IN RELATION TO**  
**REGION OF COLLEGE CAMPUSES**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	85272.386	5	17054.477	174.339	.000
Within Groups	113866.472	1164	97.823		
Total	199138.858	1169			

An examination of the Table 4.40 depicts that personality hardiness at different regions varied significantly from one another clearly demonstrating a significant effect of region of college campuses on the personality hardiness of undergraduate students with an F-value of 174.339, which is statistically significant at .01 level of confidence.

As a significant F-value is obtained from the one-way analysis of variance, it shows only that the means are not all equal. To explore the significant differences among the six groups compared or to determine which groups differ significantly from one another, Tukey's Post-Hoc HSD test was applied between the groups and obtained results are presented in the Table 4.41.

**TABLE 4.41**  
**SUMMARY OF TUKEY'S POST-HOC HSD TEST WITH RESPECT TO**  
**PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS IN**  
**VARIOUS REGIONS OF JAMMU AND KASHMIR**

<b>(I) Regions</b>	<b>(J) Regions</b>	<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>Sig.</b>
SK	NK	6.385	1.002	.000
SK	CK	.282	1.002	1.000
SK	JR	1.021	1.002	.912
SK	CV	2.928	1.002	.041
SK	PR	24.287	1.002	.000
NK	CK	6.103	1.002	.000
NK	JR	5.364	1.002	.000
NK	CV	3.456	1.002	.008
NK	PR	17.903	1.002	.000
CK	JR	.738	1.002	.977
CK	CV	2.646	1.002	.088
CK	PR	24.005	1.002	.000
JR	CV	1.908	1.002	.400
JR	PR	23.267	1.002	.000
CV	PR	21.359	1.002	.000

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range



An examination of the Table 4.41 reveals that the p-value of mean difference between students of south Kashmir and North Kashmir ( $p=.000$ ) is found significant at 0.01 level of confidence for personality hardiness. Based on the mean analysis, the students of south Kashmir score more (Mean=107.00) as compared to undergraduate students of North Kashmir (Mean=100.62). On the other hand, difference between undergraduate students of south Kashmir and Central Kashmir ( $p=1.000$ ) is found insignificant at 0.05 level of confidence for personality hardiness.

From the analysis it has come to fore that undergraduate students from south Kashmir and Jammu region didn't differ significantly in their personality hardiness ( $p=0.912$ ). Whereas undergraduate students of South Kashmir differ significantly in their personality hardiness from Chenab valley undergraduate students ( $p=.041$ ). Based on mean analysis, the undergraduate students of south Kashmir score more personality hardiness (Mean=107.00) as compared to students of Chenab valley (Mean=104.07).

From the Table 4.41, it is clear that undergraduate students from south Kashmir and Peer Panjal range ( $p=.000$ ) differ significantly in their personality hardiness. Based on mean analysis, the undergraduate students of Peer Panjal range score less on hardy personality traits (Mean=82.71) as compared to undergraduate students of south Kashmir (Mean=107.00). Conversely, students from north Kashmir and Central Kashmir ( $p=.000$ ) differ significantly in their personality hardiness. Based on mean analysis, the undergraduate students of Central Kashmir score more in personality hardiness (Mean=106.72) as compared to students of North Kashmir (Mean=100.62).

The results further revealed that there is a significant difference between undergraduate students of north Kashmir and Jammu region ( $p=.000$ ) in their personality hardiness. Based on mean analysis, the undergraduate students of Jammu region score more personality hardiness (Mean=105.98) as compared to undergraduate students of North Kashmir (Mean=100.62). Moreover, undergraduate students of north Kashmir and Chenab valley ( $p=.008$ ) differ significantly in their personality hardiness. Based on mean analysis, the undergraduate students of Chenab valley score more in personality hardiness (Mean=104.07) as compared to students from north Kashmir (Mean=100.62).

Table 4.41 further reveals significant difference between undergraduate students of north Kashmir and peer Panjal range ( $p=.000$ ) for personality hardiness. Based on mean analysis, the undergraduate students of peer Panjal range score low personality hardiness (Mean=82.71) as compared to students of north Kashmir (Mean=100.62). Whereas, it was concluded that there is no significant difference between undergraduate students of Central Kashmir and Jammu region ( $p=.977$ ) in their personality hardiness.

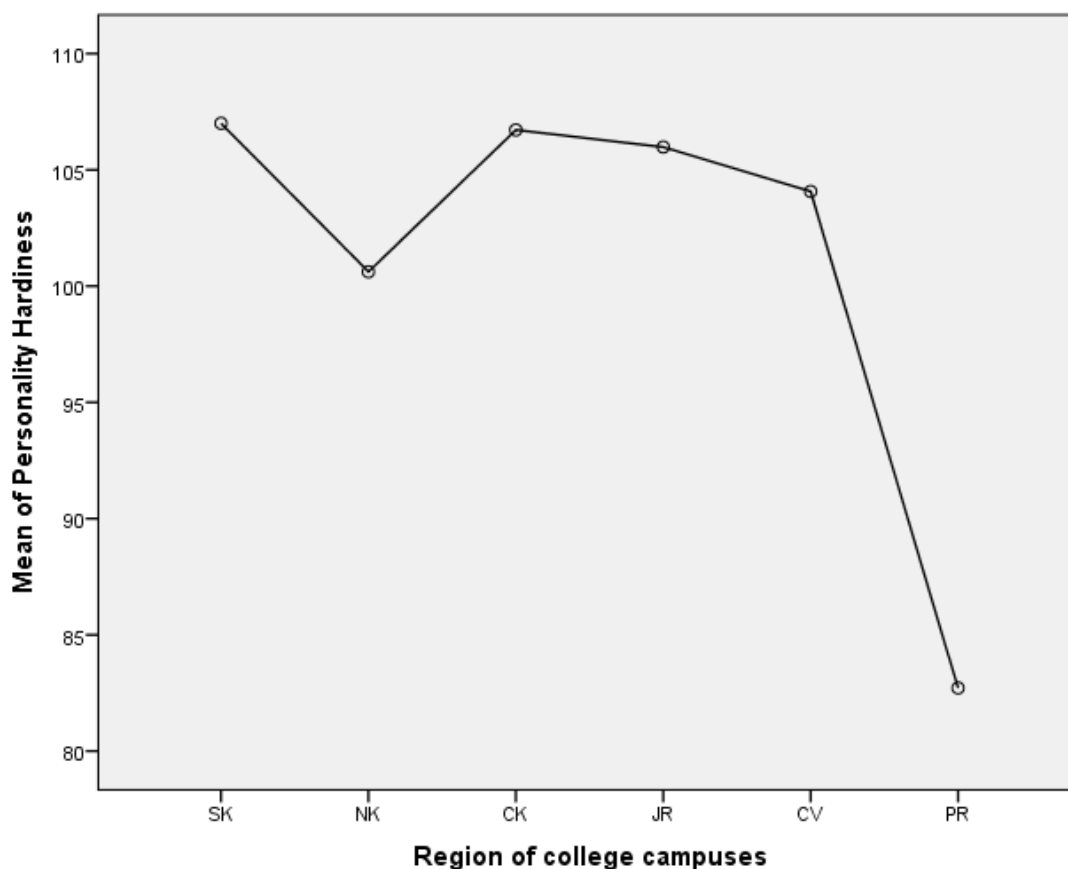
It is also revealed that the p-value is greater than 0.05 with regard to personality hardiness between undergraduate students of Central Kashmir and Chenab valley didn't differ significantly ( $p=.088$ ). Moreover, undergraduate students of Central Kashmir and Peer Panjal range differ significantly in their personality hardiness ( $p=.000$ ). Based on mean analysis, students from Central Kashmir score more (Mean=106.72) as compared to students of Peer Panjal range (Mean=82.71).

Since  $p=.400$  and hence it is concluded that there is no significant difference between undergraduate students of Jammu region and Chenab valley in their personality hardiness. Similarly, students from Jammu region and Peer Panjal range ( $p=.000$ ) differ significantly in their personality hardiness. Based on mean score, students of Jammu region score more (Mean=105.98) as compared to students of Peer Panjal range (Mean=82.71).

The results further revealed that there is a significant difference between students of Peer Panjal range and Chenab valley ( $p=.000$ ) with respect to personality hardiness. Based on mean score, students of Peer Panjal range score low (Mean=82.71) as compared to Chenab valley (Mean=104.07) in their personality hardiness. Therefore in the light of post-hoc analysis the hypothesis 5(c) "There exists no significant difference in personality hardiness of undergraduate students on the basis of region of college campuses" is partially accepted and partially rejected. In order to get better understanding regarding differences of groups, mean scores of the region of college campuses on personality hardiness is shown below in Figure 4.26.

**FIGURE 4.26**

**MEAN SCORES OF UNDERGRADUATE STUDENTS OF VARIOUS  
REGIONS OF COLLEGE CAMPUSES IN PERSONALITY HARDINESS**



**DISCUSSION ON RESULTS**

The observation of the results suggests that there exists a significant difference among groups in personality hardiness on the basis of region of college campuses. In some regions students possess high personality hardiness may be due to students accept and transform difficult conditions and feels less stressful (Maddi & Kobasa, 1984). The other reasons may be due to support from family, friends, and colleagues, building helpful and encouraging relationships to manage stressful situations (Maddi, Harvey, Khoshaba, Lu, Persico, & Brow, 2006). Similarly, undergraduate students having low levels of personality hardiness are not capable in managing novel life circumstances, they couldn't accept the negatives and positives, and they couldn't also use diverse approaches to face difficulties resulted in adjusting to life.

**4.3.8. SUMMARY OF ANALYSIS OF VARIANCE (ANOVA) ON THE SCORES OF CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

As per the sample stratification six regions of Jammu and Kashmir were taken in order to get meaningful picture of multi-campus investigation. One-way analysis of variance (ANOVA) was applied using F-test. Descriptive statistics was calculated for contextual influences of undergraduate students and the results are presented in the Table 4.42.

**TABLE 4.42**  
**DESCRIPTIVE STATISTICS OF CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS WITH RESPECT TO REGION OF COLLEGE CAMPUSES**

<b>Region</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
SK	195	163.89	45.613	3.266
NK	195	159.62	31.103	2.227
CK	195	167.28	37.597	2.692
JR	195	198.77	29.330	2.100
CV	195	188.70	32.279	2.312
PR	195	225.72	24.482	1.753
Total	1170	184.00	41.221	1.205

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range

As there is one independent variable (region of college campuses) encompassing six groups as mentioned above in the Table 4.42. Therefore, One-Way ANOVA was applied to explore the significant differences and the results are presented in the table 4.43.

**TABLE 4.43**  
**SUMMARY OF ONE-WAY ANOVA WITH RESPECT TO CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS IN RELATION TO REGION OF COLLEGE CAMPUSES**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	635505.348	5	127101.070	109.521	.000
Within Groups	1350843.631	1164	1160.519		
Total	1986348.979	1169			

An examination of the Table 4.43 depicts that contextual influences at different regions varied significantly from one another, clearly demonstrating a significant effect of region of college campuses on the contextual influences of undergraduate students with an F-value of 109.521, which is statistically significant at .01 level of confidence.

As a significant F-value is obtained from the one-way analysis of variance, it shows only that the mean scores are not all equal. To explore the significant differences among the six groups compared or to determine which group differs significantly from one another, Tukey's Post-Hoc HSD test was applied between the groups and obtained results are presented in the Table 4.44.

**TABLE 4.44**  
**SUMMARY OF TUKEY'S POST-HOC HSD TEST WITH RESPECT TO**  
**CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS IN**  
**VARIOUS REGIONS OF JAMMU AND KASHMIR**

<b>(I) Regions</b>	<b>(J) Regions</b>	<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>Sig.</b>
SK	NK	4.277	3.450	.817
SK	CK	3.390	3.450	.924
SK	JR	34.877	3.450	.000
SK	CV	24.805	3.450	.000
SK	PR	61.826	3.450	.000
NK	CK	7.667	3.450	.228
NK	JR	39.154	3.450	.000
NK	CV	29.082	3.450	.000
NK	PR	66.103	3.450	.000
CK	JR	31.487	3.450	.000
CK	CV	21.415	3.450	.000
CK	PR	58.436	3.450	.000
JR	CV	10.072	3.450	.042
JR	PR	26.949	3.450	.000
CV	PR	37.021	3.450	.000

**Note:** SK= South Kashmir, NK= North Kashmir, CK=Central Kashmir, JR= Jammu Region, CV= Chenab Valley, PR= Peer Panjal Range.

An examination of the Table 4.44 reveals that the p-value of mean difference between undergraduate students of south Kashmir and North Kashmir ( $p=.817$ ) is found insignificant at 0.05 level of confidence for contextual influences. While, mean difference between undergraduate students of south Kashmir and Central Kashmir ( $p=.924$ ) is found insignificant at 0.05 level of confidence for contextual influences.

From the analysis it has come to fore that undergraduate students of south Kashmir differ significantly in their contextual influences as compared to students of Jammu region ( $p=0.000$ ). Based on mean analysis, the undergraduate students of Jammu region score more (mean=198.27) as compared to students of south Kashmir (mean=163.89). On the other hand, undergraduate students of South Kashmir differ significantly in their contextual influences as compared to students from Chenab valley ( $p=.000$ ). Based on mean analysis, the undergraduate students of Chenab valley perceive more contextual influences (Mean=188.70) as compared to students of south Kashmir (Mean=163.89).

From the Table 4.44, it is clear that undergraduate students from south Kashmir and Peer Panjal range ( $p=.000$ ) differ significantly in their contextual influences. Based on mean analysis, the undergraduate students of Peer Panjal range score more (Mean=225.72) as compared to students of south Kashmir (Mean=163.89) in their contextual influences. However, undergraduate students from north Kashmir and Central Kashmir ( $p=.228$ ) didn't differ significantly in their contextual influences.

The results further revealed that there is a significant difference between undergraduate students of north Kashmir and Jammu region ( $p=.000$ ) in their contextual influences. Based on mean analysis, the undergraduate students of Jammu region score more (Mean=198.77) as compared to undergraduate students of North Kashmir (Mean=159.62) in their contextual influences. Similarly, undergraduate students of north Kashmir and Chenab valley ( $p=.000$ ) differ significantly in their contextual influences. Based on mean analysis, the undergraduate students of Chenab valley score more (Mean=188.70) as compared to undergraduate students of north Kashmir (Mean=159.62) in their contextual influences.

Table 4.44 further reveals that significant difference between undergraduate students of north Kashmir and peer Panjal range ( $p=.000$ ) for contextual influences. Based on mean analysis, the undergraduate students of peer Panjal range score more (Mean=225.72) as compared to undergraduate students of north Kashmir (Mean=159.62) in their contextual influences. Whereas, it is concluded that there is a significant difference between undergraduate students of Central Kashmir and Jammu region ( $p=.000$ ) in their contextual influences. Based on mean analysis, students of Jammu region score more (Mean=198.70) as compared to students of Central Kashmir (Mean=167.28). It is also revealed that significant difference was found

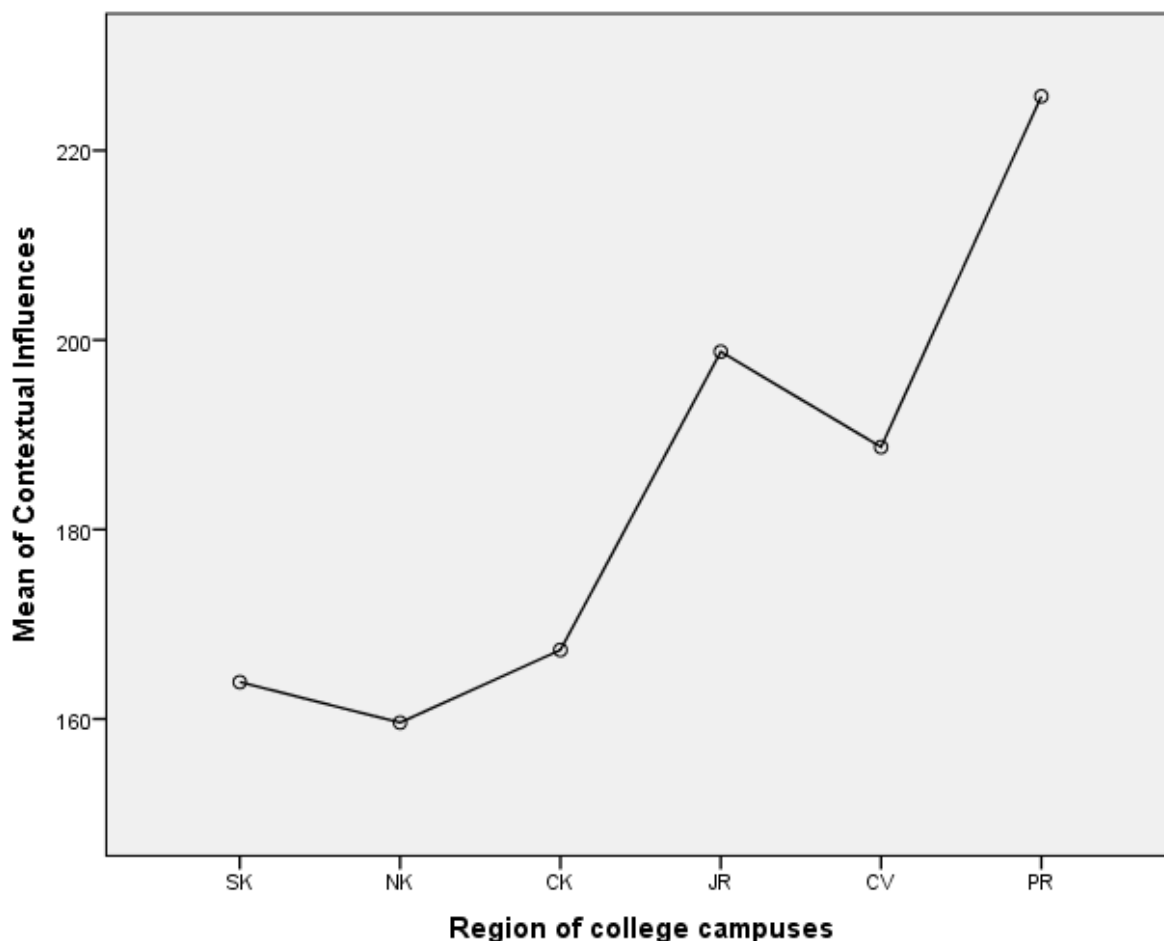
between undergraduate students of Central Kashmir and Chenab valley ( $p=.000$ ) on contextual influences. Based on mean analysis, undergraduate students of Chenab valley score more (Mean=188.70) as compared to undergraduate students of Central Kashmir (Mean=167.28). Moreover, undergraduate students of Central Kashmir and Peer Panjal range differ significantly in their contextual influences ( $p=.000$ ). Based on mean analysis, Peer Panjal range score more (Mean=225.72) as compared to undergraduate students of Central Kashmir (Mean=167.28) in their contextual influences.

Since  $p=.042$ , hence it is concluded that there is a significant difference between undergraduate students of Jammu region and Chenab valley in their contextual influences. Based on mean score, undergraduate students of Jammu region score more (Mean=198.77) as compared to undergraduate students of Chenab valley (Mean=188.70). Similarly, undergraduate students from Jammu region and Peer Panjal range ( $p=.000$ ) differ significantly in their contextual influences. Based on mean score, undergraduate students of Peer Panjal range score more (Mean=225.72) as compared to undergraduate students of Jammu region (Mean=198.77) in their contextual influences.

The results further revealed that there is a significant difference between undergraduate students of Peer Panjal range and Chenab valley ( $p=.000$ ) with respect to contextual influences. Based on mean score, undergraduate students of Peer Panjal range score more (Mean=225.72) as compared to undergraduate students of Chenab valley (Mean=188.70) in their contextual influences. Therefore, in the light of post-hoc analysis the hypothesis 5(d) "There exists no significant difference in contextual influences of undergraduate students on the basis of region of college campuses" is partially accepted and partially rejected. In order to get better understanding regarding differences of groups, mean scores of the region of college campuses on contextual influences is shown below in Figure 4.27.

**FIGURE 4.27**

**MEAN SCORES OF UNDERGRADUATE STUDENTS OF VARIOUS  
REGIONS OF COLLEGE CAMPUSES IN CONTEXTUAL INFLUENCES**



**DISCUSSION ON RESULTS**

The results of the present study indicated that students of different regions of Jammu and Kashmir differ significantly in their contextual influences. Interesting, undergraduate students from Peer Panjal range perceive more influence as compared to their counterparts. While as, students of Jammu region also perceive more contextual influences as compared to other groups as given above in detail. There may be number of possible explanations like students perceive less psychological support, higher behavioral control, parental pressure and huge psychological control, similarly students of these regions perceive more influence of peer on academics, social adaptation, personal decision making and psychological adjustment. Moreover, students perceive less cognitive engagement in classroom, low permissiveness and



some student's perceive low control from college campus. It might be poor academic standards, class sizes, increased competition for jobs, and the pressure for high grades (Pullen et al., 2000).

## **CORRELATIONAL ANALYSIS**

In order to measure the relationship between independent and dependent variables, Karl Pearson's coefficient of correlation method was applied. This correlation method is one of the most commonly used technique in the examination of psychological constructs. So, the third objective of the present study is "to examine the relationship of personality hardiness, anomie and contextual influences with academic dishonesty of undergraduate students". Keeping in mind the objective of the study, aforementioned correlation was applied.

### **4.4 RELATIONSHIP OF ACADEMIC DISHONESTY WITH ANOMIE, PERSONALITY HARDINESS AND CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS**

Relationship of academic dishonesty of undergraduate students with anomie, personality hardiness and contextual influences has been analysed separately under the following headings.

#### **4.4.1 CORRELATION BETWEEN ACADEMIC DISHONESTY AND ANOMIE OF UNDERGRADUATE STUDENTS**

#### **4.4.2 CORRELATION BETWEEN ACADEMIC DISHONESTY AND PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS**

#### **4.4.3 CORRELATION BETWEEN ACADEMIC DISHONESTY AND CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS**

#### **4.4.1 CORRELATION BETWEEN ACADEMIC DISHONESTY AND ANOMIE OF UNDERGRADUATE STUDENTS**

A correlation matrix using Karl Pearson's product moment correlation was constructed and studied to see how each measured constructs correlated with all the other variables in the study. Examination of the correlation between anomie and academic dishonesty are displayed in Table 4.45.

**TABLE 4.45**

**SUMMARY OF CORRELATION BETWEEN ACADEMIC DISHONESTY  
AND ANOMIE OF UNDERGRADUATE STUDENTS**

DEPENDENT VARIABLES ↓	INDEPENDENT VARIABLES			
	Meaninglessness	Distrust	Moral Decline	ANOMIE
Cheating in Examination	.190**	.171**	.154**	.239**
Plagiarism	.149**	.116**	.230**	.217**
Outside Help	.172**	.136*	.211**	.235**
Prior Cheating	.116**	.280**	.229**	.282**
Falsification	.162**	.263**	.294**	.313**
Lying about Academic Assignments	.140**	.165**	.168**	.217**
<b>ACADEMIC DISHONESTY</b>	.225**	.259**	.297**	.351**

\*\*Significant at 0.01 level

Table 4.45 displays correlation between anomie and academic dishonesty of undergraduate students. The relationship between independent and dependent variables were in the expected directions with moderate to low magnitudes. Examination of the correlation matrix reveals that anomie has the highest bivariate correlation with the academic dishonesty ( $r=.351^{**}$ ). The Table 4.45 further shows that ‘cheating in examination’ a component of academic dishonesty was found to be significantly and positively linked to meaninglessness ( $r=.190^{**}$ ), distrust ( $r=.171^{**}$ ) moral decline ( $r=.154^{**}$ ), and anomie ( $r=.239^{**}$ ).

Viewing the entries in aforementioned table shows that plagiarism was positively and significantly related to meaninglessness ( $r=.149^{**}$ ), distrust, ( $r=.116^{**}$ ), moral decline ( $r=.230^{**}$ ) and anomie ( $r=.217^{**}$ ). The correlation of outside help with meaninglessness is ( $r=.172^{**}$ ), distrust is ( $r=.136^{*}$ ), moral decline is ( $r=.211^{**}$ ), and anomie is in the expected direction ( $r=.235^{**}$ ), thus consistent with the relevant anomie and academic dishonest literature, pointing to a higher perception of anomie for students will lead to higher outside help in college campus. In terms of the tendency to prior cheating and meaninglessness, their association was found to be moderate ( $r=.116^{**}$ ), prior cheating and distrust ( $r=.280^{**}$ ), prior cheating and moral decline ( $r=.229^{**}$ ), prior cheating and total anomie ( $r=.282^{**}$ ). Though significant, it

may be important to note that the associations and directions of above all constructs were positive, which can be considered as a sign of anomie that increasing academically dishonest practices of undergraduate students.

Furthermore, 'falsification' a dimension of academic dishonesty was found to be positively connected to meaninglessness ( $r=.162^{**}$ ), distrust ( $r=.263^{**}$ ), moral decline ( $r=.294^{**}$ ), and total anomie ( $r=.313^{**}$ ), suggesting that being meaningless life, distrust or moral disruption in society was associated with higher levels of falsification in academic related activities. Interestingly, lying about academic assignments is also positively related to meaninglessness ( $r=.140^{**}$ ), distrust, ( $r=.165^{**}$ ), moral decline ( $r=.168^{**}$ ), and total anomie ( $r=.217^{**}$ ). Additionally, academic dishonesty was positively related to meaninglessness ( $r=.225^{**}$ ), distrust ( $r=.259^{**}$ ), moral decline ( $r=.297^{**}$ ), and total anomie ( $r=.351^{**}$ ). It may be significant to note that decline in moral beliefs can increase the likelihood of involvement in deviant actions such as dishonest practices in academia. Therefore, the proposed hypothesis 6(a) "There exists no significant relationship between academic dishonesty and anomie of undergraduate students" stands rejected. Meaning thereby there is a significant association between anomie and academic dishonesty of undergraduate students.

## **DISCUSSION ON RESULTS**

The examination of the survey data produced some noteworthy results. Based on the findings of the hypothesis, high correlation was found between independent and dependent variables. The high correlations may indicate that a higher perception of anomie increases academically dishonest behavior of students. Research outcomes suggest a number of diverse explanations may be like today's changing and turbulent environments or present age of competitions where students may feel frustration, anxiety, despair, hopelessness and discouragement. Quite commonly the undergraduate students want to adjust with environment when it is not possible thus they feel lost and may lose interest in their study and want cognitive shortcuts. This could account for higher student performance of dishonest academic acts. In academics, students' education is a means to achieve their goal i.e. employment or job attainment (Channabasavanna & Bhatti, 1977). In the educational institutions they are trained for years together but when they realize about their future life plans during

their educational career they may feel unsatisfied, isolated and distrusted because of unemployment or employment not available of their choice.

The high magnitude of correlation between cheating in examination and anomie of undergraduate students may be strengthened and continuous through social apathy. Cultural values may help to generate students' actions that are at odds with the mandates of the values themselves (Omoniyi, 2014). The participants reported that people are given more preference to wealth and success without any legitimate paths and means to achieve success. Similarly, undergraduate students perceive huge desire for achievement orientation regardless of legitimate means in attaining success in the educational sector. Further, the findings support this notion that present society is becoming a commercial venture and no longer a place for altruistic service. The participants reported that everyone is out to make hasty money and achievement however morality is vulnerable. The participants reported that our society have faulty/fragile education, political, physical, economic and social environment that cannot generate a bright future. Further, the participant's perceive that present society has lot of economic and social ills such as social injustice, moral decadence, corruption, cultism, and so on. The surveyed sample of the study reported that the higher authority or administration appoints ineligible candidates in high-ranking public offices.

The highest correlations between moral decline and dimensions as well as overall academic dishonesty would be due to rationale of societal evils such as moral decadence and loss of family values has hassle some students in the education sector to strain toward anomie (Omoniyi, 2014). Due to this, undergraduate students have resorted to the use of illegitimate actions in attaining achievement in examinations. On the other hand, it may be due to the reason that students who cheat in examination are constructing an unethical and non-moral character and value system in every aspects of life and are continuously looking for shortcuts. Students who are dishonest in their college work may be due to erosion of norms and cultural values. Researches have exposed that students with greater moral standards would involve less in academically dishonest practices (Diekhoff et al., 1996; Eisenberg, 2004).

The highest magnitude of correlations suggests that distrust and domains as well as total academic dishonesty are positively correlated. It may be due to student's perception of distrust on higher authority or administration of colleges or state levels.

These issues may inculcate perception of academic anomie, which generates a meaningless life as at the individual or college level which may increase student performance of dishonest academic practices. Associations between distrust and academic dishonesty is found positive, it implies that believing in others may generate a more open and respectful behavior based on kindness and reciprocity, but distrust i.e. lack of trust does generate dishonest academic behaviors. This very condition is evident in today's goal-oriented civilization, as undergraduate students are watching to achieve objectives quicker in any approach in order to gain grades (Kaufman, 2008). However, Yingli et al. (2014) showed that academic moral anomie is very common among undergraduates and students attribute it to external reason and social environment's effect is considered to be the most important reason.

This result is consistent with previous research study conducted by Caruana et al. (2000) reported a noteworthy and positive relationship between anomie and academic dishonesty of students. Furthermore, researchers note, that students who engage in academic dishonest practices in all parts of life are due to altering and weakening social norms of right versus wrong. On the other hand, (Calabrese & Cochran, 1990) connected social forms of alienation to greater levels of student performance of dishonest academic practices. Consequently, the pressure undergraduate students experience to maintain academic achievement has a direct association with tempting them towards academic dishonesty (Fawkner & Keremidchieva, 2004). As a result, they rely on unethical behaviors to avoid rejection (Wowra, 2007). Thus, when culture is no longer effective in one's best interest, students openly disrespect societal rules and sanctions (Tsahiridu, 2006). Moreover, Newhouse (1982) found that more alienated a student is from college-related activities, the more probable is the likelihood for academic dishonest practices. On the contrary, Sulphrey and Jnaneswar (2013) found no significant association between anomie and academic dishonesty among business school students.

#### **4.4.2 CORRELATION BETWEEN ACADEMIC DISHONESTY AND PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS**

A correlation matrix using Karl Pearson's product moment correlation was constructed and measured to see how each variable correlated with all the other variables in the study. Examination of the correlations between personality hardiness and academic dishonesty are presented in Table 4.46.

**TABLE 4.46****SUMMARY OF CORRELATION BETWEEN ACADEMIC DISHONESTY AND PERSONALITY HARDINESS OF UNDERGRADUATE STUDENTS**

<b>DEPENDENT VARIABLES</b> ↓	<b>INDEPENDENT VARIABLES</b>			
	Control	Commitment	Challenge	<b>PERSONALITY HARDINESS</b>
Cheating in Examination	-.220**	-.227**	-.184**	-.254**
Plagiarism	-.217**	-.195**	-.221**	-.255**
Outside Help	-.199**	-.230**	-.208**	-.257**
Prior Cheating	-.277**	-.287**	-.275**	-.338**
Falsification	-.364**	-.325**	-.303**	-.399**
Lying about Academic Assignments	-.220**	-.195**	-.207**	-.250**
<b>ACADEMIC DISHONESTY</b>	-.347**	-.338**	-.323**	-.406**

\*\*Significant at 0.01 level

Table 4.46 show that the coefficients of correlation between academic dishonesty and personality hardiness of undergraduate students. Viewing the entries in table 4.46 shows that cheating in examination was negatively and significantly related to control trait ( $r=-.220^{**}$ ), commitment ( $r=-.227^{**}$ ), challenge ( $r=-.184^{**}$ ) and personality hardiness ( $r=-.254^{**}$ ). The correlation between control trait and plagiarism is ( $r=-.217^{**}$ ), thus consistent with the related literature, indicating that lower trait control will increase tendency of plagiarism for students. Similarly, plagiarism was negatively correlated with commitment ( $r=-.195^{**}$ ), challenge ( $r=-.221^{**}$ ) and personality hardiness ( $r=-.255^{**}$ ).

Viewing the entries in Table 4.46, it is clear that outside help was negatively and significantly related with control ( $r=-.199^{**}$ ), commitment, ( $r=-.230^{**}$ ), challenge ( $r=-.208^{**}$ ) and personality hardiness ( $r=-.257^{**}$ ). The correlation between prior cheating and the control trait is ( $r=-.277^{**}$ ), prior cheating and commitment is ( $r=-.287^{**}$ ), prior cheating and challenge is ( $r=-.275^{**}$ ), prior cheating and personality hardiness is in the expected direction ( $r=-.338^{**}$ ), thus consistent with the related literature, indicating to a higher belief of personality hardiness of undergraduate students will decrease outside help in examination. In terms of the tendency of falsification and trait control, their correlation was found to be moderate ( $r=-.364^{**}$ ), falsification and commitment is ( $r=-.325^{**}$ ), falsification and challenge is ( $r=-.303^{**}$ ), and falsification and personality hardiness is ( $r=-.399^{**}$ ). It implies that

higher cognitive appraisal is one of the most significant traits to reduce the justifications of numerous practices of academic dishonesty. Though noteworthy, it may be important to note that the directions of above discussed associations was negative, which can be considered as a personality hardiness that can reduce academic dishonesty of undergraduate students.

Additionally, 'lying about academic assignments' a dimension of academic dishonesty was found to be negatively correlated with the control dimension ( $r=-.220^{**}$ ), commitment ( $r=-.195^{**}$ ), challenge ( $r=-.207^{**}$ ), personality hardiness ( $r=-.250^{**}$ ), suggesting that being self-controlled, committed or challenging was associated with lower levels of lying about academic assignments. Interestingly, academic dishonesty was negatively related with control ( $r=-.347^{**}$ ), commitment ( $r=-.338^{**}$ ), challenge ( $r=-.323^{**}$ ) and personality hardiness ( $r=-.406^{**}$ ). Having hardy personality traits among undergraduate students can desire not to cheat in examination and will devote time, energy and concentration to hard work in order to get required grade. Therefore, the proposed hypothesis 6(b), "There exists no significant relationship between academic dishonesty and personality hardiness of undergraduate students" stands rejected. These results demonstrating that personality hardiness is significantly and negatively correlated with all dimensions of academic dishonesty of undergraduate students.

## **DISCUSSION ON RESULTS**

The result from the present research seems to support the notion that hardy personality is negatively connected with student performance of dishonest academic practices. Examination of findings suggests a number of different explanations. For instance, students who surplus self-control has qualities that predispose them to refrain dishonest academic acts since they understand the painful or detrimental penalties of their activities. Some respondents reported higher scores on hardy personality which means they use resilience to regulate interpersonal associations and family life with well-planned under stressful circumstances. On the other hand, it may be student's excellent involvement in college work activities that lead some students to avoid dishonest academic behaviors. On the other hand, individuals possessing low self-control may use academically dishonest practices. For instance, students lacking self-control can desire to cheat in an examination but will not devote the concentration, time, and energy to college work activities (Taylor et al., 2003).

Nevertheless, the results from the present study suggest that certain characteristics of students can predict how well they adapt to the requirement of academia. Students high in personality hardiness seemed to be less affected by the stress associated with obtaining good grades (Schafer, 1996). To conclude, the high correlation demonstrating that personality hardiness can decrease cheating in examination, plagiarism, outside help, prior cheating, falsification and lying about academic assignments in the environment of college campus by portraying these trait behaviors. On the other hand, low commitment facet; control trait and challenge tendency will lead students towards higher academically dishonest practices in campuses.

The result from the current investigation seems to support the notion that personality hardiness decreases student performance of dishonest academic acts. This is consistent with previous research findings (Bolin, 2004; Gottfredson & Hirschi, 1990; Jackson et al., 2002). One of the most characteristics of normal student is the capability of control and commitment over their behavior in any conditions which can better prepared to the students not to do wrongdoing behaviors. Undergraduate students who believe self-confidence about their academic capabilities are more probable to perceive dishonest academic practices as unethical (Elias, 2009). Nevertheless, Hystad et al. (2009) revealed that personality hardiness was significantly and negatively connected with health complaints and academic stress. However, personality hardiness was also moderated the association between educational health and stress. Moreover, Błachnio (2019); Kumar (2016) found that academic dishonesty was negatively related with self-control of students. Conversely, Wiemers-Wolfe (2000) exposed significant negative relationship between academic self-control and academic dishonesty.

#### **4.4.3 CORRELATION BETWEEN ACADEMIC DISHONESTY AND CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS**

A correlation matrix using Karl Pearson's product moment correlation was constructed and examined to see how each variable is correlated with all the other variables in the study. A number of contextual variables were evaluated in order to build a predictive model of academic dishonesty. Examination of the correlations between dimensions of contextual influences and academic dishonesty are presented in the Table 4.47.



**TABLE 4.47**

**SUMMARY OF CORRELATION BETWEEN ACADEMIC DISHONESTY AND CONTEXTUAL INFLUENCES OF UNDERGRADUATE STUDENTS**

DEPENDENT VARIABLES ↓	INDEPENDENT VARIABLES			
	Peer Influence	Parental Influence	Institutional Climate	CONTEXTUAL INFLUENCES
Cheating in Examination	.241**	.200**	.127**	.234**
Plagiarism	.263**	.154**	.111**	.217**
Outside Help	.225**	.143**	.135**	.210**
Prior Cheating	.300**	.285**	.341**	.396**
Falsification	.335**	.263**	.253**	.357**
Lying about Academic Assignments	.261**	.229**	.212**	.295**
<b>ACADEMIC DISHONESTY</b>	<b>.382**</b>	<b>.297**</b>	<b>.265**</b>	<b>.394**</b>

\*\*Significant at 0.01 level

Table 4.47 shows correlation statistics of the academic dishonesty and contextual influences of undergraduate students. It is clear that peer influence was positively and significantly related with cheating in examination ( $r=.241^{**}$ ), plagiarism, ( $r=.263^{**}$ ), outside help ( $r=.225^{**}$ ), prior cheating ( $r=.300^{**}$ ), falsification ( $r=.335^{**}$ ), lying about academic assignments ( $r=.261^{**}$ ), and academic dishonesty ( $r=.382^{**}$ ).

Reviewing the entries in the table 4.47, is obvious that parental influence was positively and significantly related with cheating in examination ( $r=.200^{**}$ ), plagiarism, ( $r=.154^{**}$ ), outside help ( $r=.143^{**}$ ), prior cheating ( $r=.285^{**}$ ), falsification ( $r=.263^{**}$ ), lying about academic assignments ( $r=.229^{**}$ ), and academic dishonesty ( $r=.297^{**}$ ). In terms of the institutional climate with cheating in examination ( $r=.127^{**}$ ), plagiarism, ( $r=.111^{**}$ ), outside help ( $r=.135^{**}$ ), prior cheating ( $r=.341^{**}$ ), falsification ( $r=.253^{**}$ ), lying about academic assignments ( $r=.212^{**}$ ), and academic dishonesty ( $r=.265^{**}$ ). Additionally, contextual influences were found positively correlated with the cheating in examination ( $r=.234^{**}$ ), plagiarism, ( $r=.217^{**}$ ), outside help ( $r=.210^{**}$ ), prior cheating ( $r=.396^{**}$ ), falsification ( $r=.357^{**}$ ), lying about academic assignments ( $r=.295^{**}$ ), and academic dishonesty ( $r=.394^{**}$ ). Thus, the proposed hypothesis 6(c) “There exists no significant relationship between academic dishonesty and contextual influences of undergraduate students” stands rejected. The association between these variables is found positive

and significant which indicates that contextual variables have a potential effect on student performance of dishonest academic behaviours.

## **DISCUSSION ON RESULTS**

The relationship among peer influence, parental influence, institutional climate and total contextual influences with various dimensions and total scores of academic dishonesty is found significantly positive. It indicates that influence by peer, parents and institution climate aids to increase dishonest academic practices. Research outcomes suggest a number of different reasons. For instance, prior cheating behavior, time management problems, lack of respect for authority, perceived pleasure from cheating, and cheating culture accepted by the community (Buckley et al., 1998; Chapman et al., 2004; Park, 2003)

Peer influence is found significantly connected with academic dishonest practices. The possible explanations may be pressure to succeed and influence of peers' behavior may suggest that academic dishonesty not only is learned from observing the behavior of peers, but that peers' behavior provides a kind of normative support for academic dishonesty. Perhaps, other reasons may be helping a friend, fear of failure, peer pressure, a monetary reward or extenuating circumstances (Schab, 1991). Justifications such as helping a friend and avoiding failure may in some cases temporarily be perceived by students as more important than the value of honesty and academic integrity. Research showed that the perception of peer involvement in academic dishonesty was meaningfully associated to individual academic dishonesty behavior. Because the knowledge of perceiving others academic dishonesty is closely associated to the practice of academic dishonesty oneself, this finding is also consistent with prior research investigations (Jurdi et al., 2011; Ma et al., 2013; O'Rourke et al., 2010).

Next, parental influence is positively correlated to dishonest academic practices. The reasons may be parental expectations for academic success may also cause children to adopt dishonest academic practices to meet their parents' wishes and desires for good grades. Present findings suggest that greater the parental pressure placed on students for success, the greater the chances cheating will occur. Perhaps, it may be more behavioural control, and less psychological support by parents to their children which predispose them to resort academic dishonest behaviors. However,

they struggled with the idea that ““doing your best”” was not good enough (Sarma, 2014). The other reason may be academic pressurization by parents due to limited availability of resources including seats, jobs at prestigious colleges/universities (Fawkner & Keremidchieva, 2004).

Finally, institutional climate was positively and significantly correlated with academic dishonesty. The possible reasons may be fundamental aspects like poor academic standards, class sizes, competition for jobs, new learning technologies and access to unlimited resources on the internet. Other potential reasons have been traced is extremely competitive situations for students, since it demands large amounts of effort and time spent out of college doing homework, developing projects, and studying for exams (Taylor et al., 2003). However, cheaters described their classes as significantly less personalized, satisfying, and task oriented. Besides, a context of inactive teaching, unmotivated students, with a fixed mindset could contribute to dishonest behaviors in college campus (Boysen, 2007). Moreover, it may be due to reason that class teachers are unable to engage student’s cognitively in classroom and it may be less permissive classroom climate and poorly controlled by college authority.

This result is consistent with previous research studies (Carrell, Malmstrom, & West, 2008; McCabe & Trevino, 1993; Mead et al., 2009; Smith, 2004). Boysen (2007) showed that the classroom environment is significantly connected to academic dishonesty; the more constructive the classroom climate, the less undergraduates will cheat. Recently, Bassegy & Iruoje (2016) revealed that test anxiety, attitude to schooling, parental influence, and peer pressure are significant predictors of students’ academically dishonest behaviors. It can be concluded that undergraduate students who possessed high peer and parental influence were more predisposed toward cheating in examination. Similarly, Sarita and Dahiya (2015) envisage that pressure from parents, teachers and peers may contribute to academic dishonesty. Likewise, Lin and Wen (2007) exposed that students who are extremely pressured by family, task commitment or time aspects are more probable to self-report plagiarism practices.

## **SECTION 5: REGRESSION ANALYSIS**

### **4.5. REGRESSION ANALYSIS BETWEEN INDEPENDENT VARIABLES (PERSONALITY HARDINESS, ANOMIE, CONTEXTUAL INFLUENCES) AND DEPENDENT VARIABLE (ACADEMIC DISHONESTY) OF UNDERGRADUATE STUDENTS**

To explore the influence of personality hardiness, anomie, and contextual influences on academic dishonesty of undergraduate students, multiple regression analysis were applied. Because, multiple regression analysis technique, a form of general linear modeling, is a multivariate statistical technique used to examine the relationship between a single dependent (criterion) variable and set of independent (predictor) variables (Hair et al., 2010). However, correlation can be a very useful statistical tool by they tell us nothing about predictive power of variables (Field, 2005). Multiple regression analysis examines prediction and explanation (regression coefficients, magnitude, sign, and statistical significance) for each independent (predictor) variable and attempts to develop a theoretical reason for the effects of the independent (predictor) variables (Hair et al., 2010).

So, the fourth objective of the present study was “To examine the personality hardiness, anomie and contextual influences as predictors of academic dishonesty of undergraduate students”. Keeping in mind the objective of the present study the assumptions of aforementioned technique allows performing this analysis.

#### **4.5.1. MULTIPLE REGRESSION ANALYSIS BETWEEN PERSONALITY HARDINESS, ANOMIE, CONTEXTUAL INFLUENCES (INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

In order to fit the model to predicting personality hardiness, anomie and contextual influences on academic dishonesty are measured, which are given below in table (4.48 A-C). The comprehensive details of the fit of the regression model and its validity are presented in following tables.

**TABLE 4.48 (A)**  
**SUMMARY OF MULTIPLE REGRESSION ANALYSIS BETWEEN**  
**PERSONALITY HARDINESS, ANOMIE, CONTEXTUAL INFLUENCES**  
**(INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY**  
**(DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

Predictors	R	R Square	Adjusted R Square	Std. Error of the Estimate	F value	Sig.
PH, CI, AN	.511	.261	.259	9.448	.261	137.020

Predictors: (Constant), Personality Hardiness (PH), Contextual Influences (CI), Anomie (AN)

Dependent Variable: Academic Dishonesty

The table 4.48 (A) of regression analysis provided by data analysis is a summary of the model. This summary table provides the value R and R<sup>2</sup> for the model that has been derived. From these data, R i.e. multiple correlation has a value of .511 and R<sup>2</sup> i.e. coefficient of determination has a value of .261, which indicates that personality hardiness, anomie and contextual influence can account for 26.1% of the variation in the academic dishonesty scores. There might be many aspects that can explain this variation, but this model, which includes three independent variables, can explain 26.1% of it.

**TABLE 4.48 (B)**  
**SUMMARY OF ANOVA FOR REGRESSION ANALYSIS**

MODEL	Sum of Squares	Df	Mean Square	F	Sig.
Regression	36696.757	3	12232.252	137.020	.000 <sup>b</sup>
Residual	104092.663	1166	89.273		
Total	140789.420	1169			

a. Dependent Variable: Academic Dishonesty

b. Predictors: (Constant), Personality Hardiness, Contextual Influences, Anomie

This part of the regression output reports on analysis of variance (ANOVA). The summary table shows the various sum of squares described in Table 4.48 (B) and degrees of freedom associated with each. For the data, F-value is 137.020, p<0.01 level of significance. Therefore, it can be concluded that regression model results in significantly better prediction of academic dishonesty of undergraduate students. In short, the regression model overall predicts academic dishonesty significantly well.

Therefore, the proposed regression model is a good fit. Therefore, regression analysis is allowed and feasible.

**TABLE 4.48 (C)**  
**SUMMARY OF COEFFICIENTS FOR REGRESSION ANALYSIS**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	51.303	4.078		12.580	.000
Anomie	.188	.031	.171	6.066	.000
Personality Hardiness	-.206	.024	-.245	-8.528	.000
Contextual Influences	.068	.007	.257	9.376	.000

a. Dependent Variable: Academic Dishonesty

The ANOVA shows whether the model, overall, results in a significantly good degree of prediction of the academic dishonesty (dependent variable) of undergraduate students. However, the ANOVA doesn't show about the individual contribution of variables in this model. The table 4.48 (C) provides details of the model parameters (the beta values) and the significance of these values. Therefore, it can be concluded that personality hardiness, anomie and contextual influences make significant contribution to predicting academic dishonesty of undergraduate students. Therefore, the proposed hypothesis that "personality hardiness, anomie and contextual influences are not significant predictors of academic dishonesty of undergraduate students" stands rejected. Reviewing the results, it can be concluded that personality hardiness, anomie and contextual influences are significant predictors of academic dishonesty with the higher magnitude of contribution. The regression equation is given below:

$$\text{Academic Dishonesty} = 51.303 + 0.188 \text{ X Anomie} - 0.206 \text{ X Personality Hardiness} + 0.068 \text{ X Contextual Influences}$$

## DISCUSSION ON RESULTS

A multiple regression analysis using anomie, personality hardiness and contextual influences as predictor variables and academic dishonesty as the criterion variable was run. The results indicated that the best fitting model, in which all predictors had a statistically significant contribution. Our estimates indicate that increase in the anomie and contextual influences transforms into positive effect on academically dishonest behaviors whereas personality hardiness entails negative

effect on dishonest academic practices of students. Research findings suggest that there may be number of reasons for academically dishonest practices of students. The students may feel turbulent environment in society which lead them to opt dishonest academic practices in college campus.

The participants reported that they feel lonely, develop hostile perception towards others, lose their morals, and behave based on self-interest. Perception of anomie leads the individual to feel angry and frustrated, powerlessness, meaninglessness, disappointment and distrust to authority and society. Perhaps, it may be due to student's frustration because of unemployment and insecurity. Previous researches support the above-findings and reveal that definite social change has occurred in current society, which has increased the frequency of academically dishonest practices in college campuses (Caruana, Ewing & Ramaseshan, 2000). On the other hand, society endorses egocentrism and doing whatever it takes to be at the top and ahead of others (Bushweller, 1999).

Next, personality hardiness affects academic dishonesty negatively it implies that with the increase of personality hardiness, student performance of dishonest behavior can be reduced. It may be due to the fact that students possessing personality hardiness traits do not give up easily under pressure and have the capability to behave in an adaptive manner. Thus, hardy undergraduate students understand events in primary appraisal when things go wrong or things are out of control and events become unpredictable. This result is consistent with Chapman et al. (2004); Tibbetts, (1999), revealed that positive associates of cheating intentions include presence of high aggression features, perceived pleasure from cheating, and lack of self-control among students could increase frequency of academic dishonesty in colleges.

Additionally, contextual influences significantly predict academic dishonesty of undergraduate students. It may be due to the fact that some students feel the need to cheat due to the pressure from parents or peers to be successful, while others feel the need because they have failed to study for an exam, because the class is difficult, or because they fear they will fail the assignment, exam, or class. Further, similar to college admission, students feel the need to achieve because graduate programs and professional schools require good grades for admission or job (Bowers, 1964; McCabe et al., 1994). The other possible reason may be academic community may not recognize and enforce the moral values among undergraduate students. This

finding is also in line with other studies showed that contextual factors can influence academic dishonesty of undergraduate students. The frequency of student performance of dishonest academic acts increases when alienation and the pressure to attain good grades are high (McCabe, Treviño, & Butterfield, 2001; Whitley, 1998). Furthermore, Boysen (2007) indicated that students perform more dishonest academic acts in classroom where students are not involved, that lack organization and order and lack of teacher control are connected to higher academically dishonest practices. Additionally, Sarita and Dahiya (2015) who predicts that pressure from parents, teachers and peers may contribute to academic dishonesty.

## **SECTION 6: STEPWISE REGRESSION ANALYSIS**

### **4.6. STEPWISE REGRESSION ANALYSIS BETWEEN DIMENSIONS OF ANOMIE, PERSONALITY HARDINESS AND CONTEXTUAL INFLUENCES (INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

In order to explore the contribution of independent variables to dependent variable of undergraduate students, the most popular sequential statistical method is stepwise estimation, it was used which enables the researcher to examine the contribution of each independent variable to the regression model (Heir et al., 2010). Academic dishonesty constituted the dependent (criterion) variable of the study while various dimensions of anomie, personality hardiness and contextual influences was used as independent variables (predictors).

Stepwise regression analysis constituted the last part of the analysis of the present study. The fifth objective of the study is “to determine the contribution of various dimensions of personality hardiness, anomie and contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students”. The detailed results and their interpretation along with necessary tables are presented in the following sections.

#### **4.6.1. STEPWISE REGRESSION ANALYSIS BETWEEN DIMENSIONS OF ANOMIE (INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

In order to fit the model to predicting dimensions of anomie (meaninglessness, distrust and moral decline) on academic dishonesty are measured, which are given



below in table 4.49 (A-C). This approach enables the researcher to examine the contribution of each independent variable to the regression model. The comprehensive details of the fit of the regression model and its validity are presented in following tables.

**TABLE 4.49 (A)**  
**SUMMARY OF STEPWISE REGRESSION ANALYSIS BETWEEN**  
**DIMENSIONS OF ANOMIE (INDEPENDENT VARIABLES) AND**  
**ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF**  
**UNDERGRADUATE STUDENTS**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>R Square Change</b>	<b>F Change</b>	<b>Sig.</b>
1	.297 <sup>a</sup>	.088	.087	10.484	.088	113.013	.000
2	.342 <sup>b</sup>	.117	.115	10.322	.029	37.959	.000
3	.362 <sup>c</sup>	.131	.128	10.245	.014	18.492	.000

a. Predictors: (Constant), Moral Decline

b. Predictors: (Constant), Moral Decline, Distrust

c. Predictors: (Constant), Moral Decline, Distrust, and Meaninglessness

Dependent Variable: Academic Dishonesty

The Table 4.49 (A) shows the summary of stepwise regression model of dimensions of anomie i.e. meaninglessness, distrust, moral decline and academic dishonesty of undergraduate students. A result of regression analysis Table (4.49-A) shows that moral decline was the most potential predictor of academic dishonesty of undergraduate students. The square of multiple correlations  $R^2 = 0.088$ , also referred to as the coefficient of determination shows that 8.8% of the variance was explained by moral decline. After moral decline, distrust emerged as the second important predictor of academic dishonesty of undergraduate students. Moral decline and distrust combined explained 11.7% of variance in academic dishonesty of which distrust individually contributed 2.9% of variance. Meaninglessness emerged as the third important predictor of academic dishonesty. Moral decline, distrust and meaninglessness combined explained 13.1 % of variance in academic dishonesty; of which meaninglessness individually contributed 1.4% variance.

F-values of moral decline ( $F = 113.013$ ,  $p < 0.01$ ), distrust ( $F = 37.959$ ,  $p < 0.01$ ) and meaninglessness ( $F = 18.492$ ,  $p < 0.01$ ) shows to conclude that moral decline,

distrust and meaninglessness contributed significantly in determining the academic dishonesty among undergraduate students.

**TABLE 4.49 (B)**  
**SUMMARY OF ANOVA FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	12420.617	1	12420.617	113.013	.000 <sup>b</sup>
	Residual	128368.803	1168	109.905		
	Total	140789.420	1169			
2	Regression	16464.504	2	8232.252	77.274	.000 <sup>c</sup>
	Residual	124324.916	1167	106.534		
	Total	140789.420	1169			
3	Regression	18405.390	3	6135.130	58.452	.000 <sup>d</sup>
	Residual	122384.030	1166	104.961		
	Total	140789.420	1169			

a. Dependent Variable: Academic Dishonesty

b. Predictors: (Constant), Moral Decline

c. Predictors: (Constant), Moral Decline, Distrust

d. Predictors: (Constant), Moral Decline, Distrust, Meaninglessness

The ANOVA analysis provides the statistical test for overall model fit in terms of the F-ratio. So, Table 4.49 (B) of analysis of variance (ANOVA) for regression shows that moral decline, distrust and meaninglessness together contributed significant influence on academic dishonesty of undergraduate students with an F-ratio of 58.452, and a significance level of  $p < 01$ . Hence, it can be concluded that results of regression model results are significantly better prediction of academic dishonesty. Therefore, the proposed regression model is a good fit. Therefore, further regression analysis is allowed and feasible.

**TABLE 4.49 (C)**  
**SUMMARY OF COEFFICIENTS FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>T</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	40.774	1.461		27.903	.000
	Moral Decline	.953	.090	.297	10.631	.000
2	(Constant)	33.638	1.847		18.213	.000
	Moral Decline	.761	.094	.237	8.134	.000
	Distrust	.386	.063	.180	6.161	.000
3	(Constant)	29.106	2.115		13.764	.000
	Moral Decline	.658	.096	.205	6.866	.000
	Distrust	.347	.063	.161	5.519	.000
	Meaninglessness	.274	.064	.125	4.300	.000

a. Dependent Variable: Academic Dishonesty

It is clear from regression analysis Table 4.49 (C) shows that moral decline, distrust, and meaninglessness significantly and positively contribute to academic dishonesty of undergraduate students. It is clear from the Table 4.49 (C) that the values of 'B' and 't' for moral decline (B = .658 and t = 6.866, p<0.01), distrust (B = .347 and t = 5.519, p<0.01) and meaninglessness (B = .274 and t = 4.300, p<0.01) are found statistically significant, i.e. moral decline, distrust and meaninglessness are significant predictors of academic dishonesty of undergraduate students. The overall regression equation formulated from all variables is given below.

$$\text{Academic Dishonesty} = 29.106 + 0.658 \text{ X Moral Decline} + 0.347 \text{ X Distrust} + 0.274 \text{ X Meaninglessness}$$

These findings lead to conclude that high moral decline, distrust and meaninglessness lead undergraduate students towards higher academic dishonesty. Therefore, in the light of calculated results the set hypothesis 8(a), "There is no significant contribution of various dimensions of anomie (predictor variables) to academic dishonesty (criterion variable) of undergraduate students" stands rejected. So, it can be conclude that with the increase of anomie, the performance of academically dishonest practices also increases.

## **DISCUSSION ON RESULTS**

The statistical results of stepwise regression analysis suggest that moral decline, distrust and meaninglessness lead students towards higher level of academic dishonesty. There may be number of reasons like due to rapid erosion of moral values in present society and undergraduate student's wants to achieve maximum success without efforts. Perhaps, undergraduate students don't care about right verses wrong in order to achieve achievement in academia. The participants of the study reported that they feel that there are no moral standards in society which lead them to get feeling of anomie. In anomie conditions, everyone desires to be dishonest in order to get ahead in life. The results further explore that most undergraduate students justified in doing anything if the reward is high enough for their own benefits which lead them to involve in high frequency of dishonest academic acts. This result is consistent with the findings of Obe (2005) revealed poor preparation of students for examination and the compromising attitude of the entire society are responsible for academic dishonesty. However, Egbo (2006) summarized that moral decadence and corruption are the main reasons to increase dishonest academic practices. On the other hand,

Gentina, Tang, & Gu. (2017) exposed that moral values curbed academic dishonesty among students.

The second robust predictor is distrust among undergraduate students. The reasons may be severe degree of perception of anomie among the students could be due to frustration and anxiety in the present age of competitions or high levels of aspirations which compel students to opt dishonest academic activities (Channabasavanna & Bhatti, 1977). Students develop an attitude of high ambition augments the feeling of frustration, which in turn, increases the likelihood of committing academic dishonesty. In addition, university students concern in regards to making a decent impression or obtaining a certain credential that will grant them access to pursue their chosen career, overrides their need for integrity (Konty, 2005). One can therefore theorize that a definite social change has occurred in contemporary society, which has increased the rates of academic dishonesty in universities (Caruana et al., 2000). On the other hand, Kobayashi (2011); Kobayashi and Fukushima (2012) found that belief in legitimacy of the law is a strong constraint to deviant behaviors, specifically dishonest academic practices.

#### **4.6.2. STEPWISE REGRESSION ANALYSIS BETWEEN DIMENSIONS OF PERSONALITY HARDINESS (INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

In order to fit the model to predicting dimensions of personality hardiness (control, commitment and challenge) on academic dishonesty are measured, which are given below in Table 4.50 (A-C). The comprehensive details of the fit of the regression model and its validity are presented in following tables.

**TABLE 4.50 (A)**

**SUMMARY OF STEPWISE REGRESSION ANALYSIS BETWEEN  
DIMENSIONS OF PERSONALITY HARDINESS (INDEPENDENT  
VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE)  
OF UNDERGRADUATE STUDENTS**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of Estimate</b>	<b>R Square Change</b>	<b>F Change</b>	<b>Sig.</b>
1	.347 <sup>a</sup>	.121	.120	10.296	.121	160.082	.000
2	.401 <sup>b</sup>	.160	.159	10.064	.040	52.506	.000
3	.410 <sup>c</sup>	.168	.166	10.025	.007	10.166	.000

- a. Predictors: (Constant), Control  
b. Predictors: (Constant), Control, Commitment  
c. Predictors: (Constant), Control, Commitment, Challenge  
d. Dependent Variable: Academic Dishonesty

The Table 4.50 (A) shows the summary of stepwise regression model of dimensions of personality hardiness and academic dishonesty of undergraduate students. The results of regression analysis suggest that control trait was the most potential predictor of academic dishonesty of undergraduate students. The square of multiple correlations ( $R^2$ ) = .121, also referred to as the coefficient of determination shows that 12.10% of the variance was explained by control dimension. After control, commitment emerged as the second important predictor of academic dishonesty. Control and commitment combined together, explained 16% of variance in academic dishonesty of which commitment individually contributed 4% of variance. Challenge emerged as the third important predictor of academic dishonesty. Control, commitment and challenge combined explained 16.8 % of variance in academic dishonesty; of which challenge tendency individually contributed 0.7% of variance.

F-values of control ( $F = 160.082, p < 0.01$ ), commitment ( $F = 52.506, p < 0.01$ ) and challenge ( $F = 10.166, p < 0.01$ ) shows to conclude that control, commitment and challenge contributed significantly in determining the academic dishonesty of undergraduate students.

**TABLE 4.50 (B)**  
**SUMMARY OF ANOVA FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	16970.216	1	16970.216	160.082	.000 <sup>b</sup>
	Residual	123819.204	1168	106.010		
	Total	140789.420	1169			
2	Regression	22591.997	2	11295.999	111.529	.000 <sup>c</sup>
	Residual	118197.422	1167	101.283		
	Total	140789.420	1169			
3	Regression	23613.645	3	7871.215	78.325	.000 <sup>d</sup>
	Residual	117175.774	1166	100.494		
	Total	140789.420	1169			

a. Dependent Variable: Academic Dishonesty

b. Predictors: (Constant), Control

c. Predictors: (Constant), Control, Commitment

d. Predictors: (Constant), Control, Commitment, Challenge

The ANOVA analysis provides the statistical test for overall model fit in terms of the F-ratio. So, Table 4.50 (B) of analysis of variance for regression shows that control, commitment and challenge together contributed significant influence on academic dishonesty of undergraduate students with an F-ratio of 78.325, and a significance level of  $p < 01$ . Hence, it can be concluded that regression model results are significantly better prediction of academic dishonesty of undergraduate students. Therefore, the proposed regression model is a good fit. Therefore, further regression analysis is allowed and feasible.

**TABLE 4.50 (C)**  
**SUMMARY OF COEFFICIENTS FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Unstandardized</b>		<b>Standardized</b>	<b>T</b>	<b>Sig.</b>
		<b>Coefficients</b>				
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	81.804	2.064		39.626	.000
	Control	-.740	.059	-.347	-12.652	.000
2	(Constant)	89.117	2.244		39.714	.000
	Control	-.517	.065	-.243	-8.012	.000
	Commitment	-.458	.061	-.226	-7.450	.000
3	(Constant)	91.080	2.318		39.285	.000
	Control	-.457	.067	-.214	-6.815	.000
	Commitment	-.338	.072	-.167	-4.717	.000
	Challenge	-.240	.075	-.114	-3.188	.001

a. Dependent Variable: Academic Dishonesty

It is clear from the Table 4.50 (C) that control, commitment and challenge significantly and negatively contributed to academic dishonesty of undergraduate students. It is clear from the Table 4.50 (C) the values of 'B' and 't' for control (B = -.457 and t = -6.815, p < 0.01), commitment (B = -.338 and t = -4.717, p < 0.01) and challenge (B = -.240 and t = -3.188, p < 0.01) are found statistically significant, i.e. control, commitment and challenge are significant predictors of academic dishonesty of undergraduate students. The overall regression equation formulated from all variables is given below.

$$\text{Academic Dishonesty} = 91.080 - 0.457 \text{ X Control} - 0.338 \text{ X Commitment} - 0.240 \text{ X Challenge}$$

These findings lead to conclude that higher control trait, commitment facet and challenge tendency lead undergraduate students towards lower academic dishonesty practices. Therefore, in the light of calculated results the set hypothesis 8(b), "There is no significant contribution of various dimensions of personality hardiness (predictor variables) to academic dishonesty (criterion variable) of undergraduate students" stands rejected. Meaning thereby with the increase of 'control', 'commitment' and 'challenge' dimensions of personality hardiness lead undergraduate students to decrease dishonest academic practices. In other words, it can be conclude that lower self-control, commitment and challenge tendency lead students towards higher academic dishonesty.

## **DISCUSSION ON RESULTS**

The results of step-wise regression analysis suggest that control, commitment and challenge are significant predictors of academic dishonesty of undergraduate students. This result is consistent with Błachnio (2019); Kumar (2016) found that self-control was a strong negative predictor of academic dishonesty. On the other hand, students possess low control trait predispose to cheat in regular ways. A number of scholars have noted that low self-control is directly connected with higher academic dishonesty (Arneklev et al., 1993; Barlow, 1991; Gibbs & Giever, 1995). The results of step-wise regression analysis suggest that higher control trait could decrease dishonest academic practices of students.

Next, commitment is also negatively affecting dishonest behavior of students at college level. Having this trait students being involved in daily life activities with an internal interest and curiosity around world, things as well as to oneself and to

one's work. Students having commitment facet provides ability to deal with problem in a more flexible, confident and destructive way which might decrease student frequency of dishonest academic acts. This result is consistent with (Gentina, Tang, & Gu., 2017), exposed that academic commitment controlled academic dishonesty. Conversely, Michaels and Miethe (1989) revealed significant influence of commitment and involvement on dishonest academic behavior (Michaels & Miethe 1989).

Moreover, undergraduates having challenge tendencies easily respond to life events and cope with various stressors like family, professional or occupational roles and inter-personal relationships. Hardy students have a high sense of life and work commitment, and a greater control over challenges in life. They interpret stressful and difficult experiences as normal features of their existence which is interesting and worthwhile. This might be one of the reasons to declining student performance of dishonesty academic acts. Although, personality hardiness is a set of personal beliefs, Grimes and Rezek (2005) revealed that personal beliefs about the social and moral acceptability of dishonesty are a substantial predictor of dishonest academic behaviors.

#### **4.6.3. STEPWISE REGRESSION ANALYSIS BETWEEN DIMENSIONS OF CONTEXTUAL INFLUENCES (INDEPENDENT VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE) OF UNDERGRADUATE STUDENTS**

In order to fit the model to predicting dimensions of contextual influences (peer influence, parental influence and institutional climate) on academic dishonesty are measured, which are given below in table 4.51 (A-C). The comprehensive details of the fit of the regression model and its validity are presented in following tables.



**TABLE 4.51 (A)**  
**SUMMARY OF STEPWISE REGRESSION ANALYSIS BETWEEN**  
**DIMENSIONS OF CONTEXTUAL INFLUENCES (INDEPENDENT**  
**VARIABLES) AND ACADEMIC DISHONESTY (DEPENDENT VARIABLE)**  
**OF UNDERGRADUATE STUDENTS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig.
1	.382 <sup>a</sup>	.146	.145	10.148	.146	199.152	.000
2	.413 <sup>b</sup>	.170	.169	10.005	.025	34.554	.000
3	.421 <sup>c</sup>	.177	.175	9.967	.007	10.054	.000

a. Predictors: (Constant), Peer Influence

b. Predictors: (Constant), Peer Influence, Parental Influence

c. Predictors: (Constant), Peer Influence, Parental Influence, Institutional Climate

d. Dependent Variable: Academic Dishonesty

The Table 4.51 (A) shows the summary of step-wise regression model of dimensions of contextual influence and academic dishonesty of undergraduate students. Results of regression analysis table 4.51 (A) showed that peer influence was the most potential predictor of academic dishonesty of undergraduate students. The square of multiple correlations ( $R^2$ ) = .146, also referred to as the coefficient of determination shows that 14.6% of the variance was explained by peer influence. After peer influence, parental influence emerged as the second important predictor of academic dishonesty. Peer influence and parental influence combined explained 17% of variance in academic dishonesty of which parental influence individually contributed 2.5% variance. Institutional climate emerged as the third important predictor of academic dishonesty. Peer Influence, parental influence, institutional climate combined explained 17.7 % of variance in academic dishonesty; of which institutional climate individually contributed 0.7% variance.

F-values of peer influence ( $F = 199.152$ ,  $p < 0.01$ ), parental influence ( $F = 34.554$ ,  $p < 0.01$ ) and institutional climate ( $F = 10.054$ ,  $p < 0.01$ ) shows to conclude that peer influence, parental influence, institutional climate contributed significantly in determining the academic dishonesty of undergraduate students.

**TABLE 4.51 (B)**  
**SUMMARY OF ANOVA FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	20508.724	1	20508.724	199.152	.000 <sup>b</sup>
	Residual	120280.696	1168	102.980		
	Total	140789.420	1169			
2	Regression	23967.709	2	11983.854	119.714	.000 <sup>c</sup>
	Residual	116821.711	1167	100.104		
	Total	140789.420	1169			
3	Regression	24966.365	3	8322.122	83.779	.000 <sup>d</sup>
	Residual	115823.055	1166	99.334		
	Total	140789.420	1169			

a. Dependent Variable: Academic Dishonesty

b. Predictors: (Constant), Peer Influence

c. Predictors: (Constant), Peer Influence, Parental Influence

d. Predictors: (Constant), Peer Influence, Parental Influence, Institutional Climate

The ANOVA provides the statistical test for overall model fit in terms of the F-ratio. So, Table 4.51 (B) of analysis of variance for regression shows that peer influence, parental influence and institutional climate together contributed significant influence on academic dishonesty of undergraduate students with an F-ratio of 83.779, and a significance level of  $p < .01$ . Hence, it can be concluded that regression model results in significantly better prediction of academic dishonesty. Therefore, the proposed regression model is a good fit. Therefore, further regression analysis is allowed and feasible.

**TABLE 4.51 (C)**  
**SUMMARY OF COEFFICIENTS FOR REGRESSION ANALYSIS**

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>T</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	(Constant)	40.716	1.120		36.339	.000
	Peer Influence	.259	.018	.382	14.112	.000
2	(Constant)	36.253	1.340		27.047	.000
	Peer Influence	.212	.020	.313	10.746	.000
	Parental Influence	.120	.020	.171	5.878	.000
3	(Constant)	35.355	1.365		25.902	.000
	Peer Influence	.204	.020	.301	10.270	.000
	Parental Influence	.084	.023	.120	3.629	.000
	Institutional Climate	.054	.017	.102	3.171	.002

a. Dependent Variable: Academic Dishonesty

It is clear from Table 4.51 (C) that peer influence, parental Influence and institutional climate significantly and positively contributed to academic dishonesty of undergraduate students. It is clear from the Table 4.51 (C) the values of 'B' and 't' for peer influence (B = .204 and t = 10.270, p<0.01), parental influence (B = .084 and t = 3.629, p<0.01) and institutional climate (B = .054 and t = 3.171, p<0.05) are found statistically significant, i.e. peer influence, parental influence and institutional climate are significant predictors of academic dishonesty. The overall regression equation formulated from all variables is given below.

$$\text{Academic Dishonesty} = 35.355 + 0.204 \text{ X Peer Influence} + 0.084 \text{ X Parental Influence} + 0.054 \text{ X Institutional Climate}$$

These findings lead to conclude that higher peer influence, parental influence and institutional climate lead students towards higher academic dishonesty of undergraduate student. On the other hand, low institutional climate lead students towards higher academically dishonest practices. Therefore, in the light of calculated results the set hypothesis 8(c), "There is no significant contribution of various dimensions of contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students" stands rejected. Meaning thereby with the increase of contextual influences, student performance of dishonest academic acts may increase.

## **DISCUSSION ON RESULTS**

The results of the study revealed that peer influence, parental influence and institutional climate are significantly associated with increased academic dishonesty, and peer influence is the robust predictor of academic dishonesty of undergraduate students. The study exposed that the behaviours of peers tend to have a stronger influence on a student's dishonest academic practices. This result is also coherent with McCabe and Trevino (1993, 1997); the most influential associates of cheating were peer-related contextual factors. Recently, Kant (2016) found significant and positive relationship between academic dishonesty and peer pressure of senior secondary school students. Conversely, Ghanem & Mozahem (2019) found that perception plays a vital role in describing the activities of students. The more that student notices that others are involving in a certain behavior, the greater the likelihood that they will involve in the activities, even if they believe that this practice constitutes academic dishonesty. Gentina, Tang & Gu (2017) exposed peer involvement enhanced cheating behavior and cheating perception among students. Conversely, Yang, Chiang, &

Huang (2017) discovered perception of peer academic dishonesty was significant variable in respect of predicting self-reported personal academic dishonesty.

Parental influence for academics is a major source of inspiration, motivation, and support of undergraduate students. Parents displayed strong commitment to their children's education by providing them with extra paid tutoring and expressing willingness to provide support in whatever ways they can. These reasons lead students to perform dishonest academic acts. The students expressed awareness about their parents' aspirations for them and a desire to meet their family's expectations (Taylor et al., 2003). However, they struggled with the idea that "doing your best" was not good enough. The other reason might be academic pressurization by parents due to the limited availability of resources including employments, and seats at prestigious colleges (Sarma, 2014). Pressure from parents on their children is also a contributing factor to academic dishonesty (Kleiner & Lord, 1999; Quraishi & Aziz, 2017). When comparing themselves to their siblings or other peers, a fear of failure may overcome them (Murdock et al., 2001). The findings of Weiss, Gilbert, Giordano, & Davis (1993) revealed that grade orientation was positively associated with higher academic dishonesty of students.

Notably, perceived faculty dishonesty or faculty-student interaction exerted a significant influence on academically dishonest practices of students. The result is in line with Teodorescu & Andrei (2009) summarized that faculty influence on student dishonest academic practices in a significant manner is via the perceived quality and relevance of the courses they teach. As satisfaction with instruction declines, students may well devalue it, making it easier to justify cheating. Chaminuka and Nudzo (2014) recognized fear of failure and inadequate preparation for examinations, shortages of learning and teaching resources among other factors as possible causes of higher frequency of academic dishonesty. This result is also in agreement with the findings of Bassey & Iruoje (2016); Oyama (2009) that instructional facilities have significant influence on dishonest academic practices of students during examination.

## CHAPTER V

### CONCLUSIONS, RECOMMENDATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Present chapter deals with three aspects i.e. conclusions, recommendations and suggestions for future research have been provided comprehensively.

#### 5.1 CONCLUSIONS

This section reflects an attempt to portray brief summary of the findings drawn on the basis of descriptive and inferential statistics.

##### 5.1.1 Descriptive Analysis

**Objective 1: To explore the level of personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students.**

The percentage-wise distribution of undergraduate students in different levels of academic dishonesty revealed that about 00% possess high, 21.03% possess above average, 60.09% possess average, 17.09% possess below average and 1.79% undergraduate students exhibit low level of academic dishonesty. Concerning with cheating in examination (a dimension of academic dishonesty), 00% exhibit high, 8.80% possess above average, 68.80% exhibit average, 13.60% possess below average, and 8.80% undergraduate students exhibit low level of cheating in examination. In plagiarism, about 00% possess high, 25.04% possess above average, 47.00% possess average, 27.96% possess below average and 00% undergraduate students exhibit low level of plagiarism. In the area relating to outside help, 00% possess high and above average whereas 74.53% possess average, 14.87% possess below average and 10.60% undergraduate students exhibit low level of outside help. In prior cheating component, 00%, 32.90%, 36.58%, 21.68%, 8.90% undergraduate students exhibit high, above average, average, below average and low level of prior cheating respectively. In falsification dimension, 00%, 22.56%, 52.74%, 24.53% and 0.17% undergraduate students exhibit high, above average, average, below average and low level of falsification respectively. Also, 00%, 29.32%, 47.95%, 21.97% and 0.77% undergraduate students exhibit high, above average, average, below average and low level of lying about academic assignments respectively.

Percentage-wise distribution on different levels of anomie showed that 8.46%, 16.07%, 60.85%, 12.31%, and 2.31% undergraduate students perceived high, above average, average, below average and low level of anomie respectively. Dimension-wise percentage distribution of undergraduate students on different levels of meaninglessness revealed that 11.11% undergraduate students possess high level, 24.78% above average level, 52.40% average level, 9.23% below average level and 2.47% students reported low level of meaninglessness. The results of the distrust domain of anomie revealed that 0.26% undergraduate students fall in high level, 12.22% in above average level, 57.95% in average level, 29.14% in below average level and 0.43% fall in low level of feeling of distrust. Similarly, 12.74% students perceived high level of moral decline, 19.23% students perceived above average level, 51.80% exhibit average level of moral decline, 14.44% students perceived below average level of moral decline and 1.79% student's exhibit low level of moral decline.

Percentage-wise representation of undergraduate students in different levels of personality hardiness revealed that 0.18% undergraduate students possess high level, 11.90% possess above average level, 76.10% possess average level, 7.00% students possess below average level and 4.80% undergraduate students possess low level of personality hardiness. On the other hand, 0.00% undergraduate students possess high level, 12.91% above average level, 76.41% exhibit average level, 4.44% students exhibit below average level and 6.24% student's exhibit low level of control trait. Moreover, about 0.00% (n=00) possess high level, 6.50% possess above average level, 85.47% possess average level, 8.03% possess below average level and 0.00% students reported a low level of commitment. Further, 0.08% of undergraduate students possess high level, 6.84% possess above average level, 73.76% possess average level, 12.82% possess below average level and 6.50% undergraduate students possess low level of challenge tendency.

The percentage-wise representation of undergraduate students in different levels of contextual influences shows that 0.17% possess an extremely high level, 0.85% possess high level, 1.20% possess above average level, 15.81% possess average level, 32.22% possess below average level, 23.60% students fall in low level and 26.15% undergraduate students fall under extremely below level. Dimension-wise percentage distribution of undergraduate students in different levels of peer influence, the results revealed that 0.68% students possess an extremely high level, 1.37% high

category, 2.99% above average level, 18.98% average level, 24.36% possess below average level, 19.40% students perceive low level and 32.22% possess extremely low peer influence. Further, 0.26% students perceived extremely high level of parental influence, 1.71% students perceived high level, 1.96% perceived the above average level, 7.95% perceived average level, 31.20% students perceived below average level, 27.52% students perceived low level and 29.40% students perceived extremely low level of parental influence. In the area relating to institutional climate, 0.09% students perceived extremely high, 1.62% students perceived high level, 12.91 students perceived the above average level, 24.53% perceived average level, 18.12% students perceived below average level, 14.70% students perceived low level and 28.03% students perceived an extremely low level of institutional climate.

### **5.1.2 Comparative Analysis**

**Objective 2: To find out differences in personality hardiness, anomie, contextual influences and academic dishonesty of undergraduate students on the basis of gender, age, socio-economic-status and region of college campuses.**

Male and female students differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Male students are more involved in dishonest academic practices as compared to their female counterparts. On the basis of age, undergraduate students differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Younger students are more engaged in academically dishonest practices as compared to their older counterparts. Undergraduate students from low and high socio-economic-status families differ significantly on cheating in examination, plagiarism, outside help, prior cheating, falsification, lying about academic assignments and total academic dishonesty. Undergraduate students from low socio-economic-status families are more engaged in dishonest academic practices as compared to students from high socio-economic-status families.

Undergraduate male and female students differ significantly on meaninglessness, distrust, moral decline and total anomie. Female students perceive more anomie as compared to their male counterparts. On the basis of age,

undergraduate students differ significantly on meaninglessness, distrust, moral decline and total anomie. Younger students perceive more anomie as compared to their older counterparts. Students from low and high socio-economic-status families differ significantly on meaninglessness and total anomie. Students from low socio-economic-status families perceive more anomie as compared to their students from high socio-economic-status counterparts.

Male and female undergraduate students differ significantly on control, challenge and total personality hardiness. Male students have more cognitive appraisal, challenge tendency and self-control beliefs as compared to their female counterparts. On the basis of age, undergraduate students differ significantly on control, commitment, challenge and total personality hardiness. Older students have higher personality hardiness as compared to their younger counterparts. Undergraduate students from low and high socio-economic-status families didn't differ significantly on control, commitment, challenge and total personality hardiness.

Male and female undergraduate students differ significantly on institutional climate whereas peer influence, parental influence, and total contextual influence didn't differ significantly. Undergraduate male students perceive better institutional climate as compared to their female counterparts. On the basis of age, undergraduate students differ significantly on peer influence, parental influence, institutional climate and total contextual influence. It implies that younger students are more influenced by the behaviour of contextual persons as compared to their older counterparts. Undergraduate students from low and high socio-economic-status families differ significantly on peer influence, parental influence, institutional climate and total contextual influence. Undergraduate students from low socio-economic-status families perceive more peer, parental, institutional and total contextual influences as compared to students from high socio-economic-status.

The results further revealed that there was a significant difference in academically dishonest practices among students of different regions of Jammu and Kashmir. So, students from different areas tend to have diverse attitudes toward academic dishonesty. Moreover, significant difference was found among students of different regions of Jammu and Kashmir in their anomie. Similarly, significant difference among groups was found in personality hardiness on the basis of region of



college campuses. Additionally, present study showed that students from different regions of Jammu and Kashmir differ significantly in their contextual influences.

### **5.1.3 Correlational Analysis**

**Objective 4: To examine the relationship of personality hardiness, anomie and contextual influences with academic dishonesty of undergraduate students.**

Positive and significant correlation was found between anomie and academic dishonesty of undergraduate students. Personality hardiness is significantly and negatively correlated with academic dishonesty of undergraduate students. The relationship among peer influence, parental influence, institutional climate and total contextual influences with various dimensions and total academic dishonesty was found significantly positive.

### **5.1.4 Regression Analysis**

**Objective 5: To examine the personality hardiness, anomie and contextual influences as predictors of academic dishonesty of undergraduate students.**

A multiple regression analysis indicated that all predictors i.e. anomie, personality hardiness and contextual influences had a statistically significant contribution to academic dishonesty of undergraduate students.

**Objective 6: To determine the contribution of various dimensions of personality hardiness, anomie and contextual influences (predictor variables) to academic dishonesty (criterion variable) of undergraduate students.**

The results revealed that moral decline, distrust and meaninglessness are significant predictors of academic dishonesty. Moral decline was found most robust predictor of academic dishonesty of undergraduate students. After moral decline, distrust emerged as the second and meaninglessness emerged as the third important predictor of academic dishonesty. On the other hand, control, commitment and challenge are significant predictors of academic dishonesty. The most important predictor of academic dishonesty was control dimension of personality hardiness. After control, commitment emerged as the second and challenge emerged as the third important predictor of academic dishonesty of undergraduate students. Additionally, peer influence, parental influence and institutional climate are significant predictors of academic dishonesty. Peer influence was found robust predictor of academic

dishonesty of undergraduate students. After peer influence, parental influence emerged as second and institutional climate as the third predictor of academic dishonesty of undergraduate students.

## **5.2 RECOMMENDATIONS**

In the light of conclusions and the importance of the study, the following recommendations are put forth for different stakeholders i.e. university counsellors, psychologists, government officials, policy makers, parents, professors/teachers, college/university students, and society as means to reduce the occurrence of academic dishonesty in order to reinforce the academic integrity in the colleges/universities.

1. The present study revealed that academic dishonesty among undergraduate students is pervasive, which may indicate that students are not fully aware of what constitutes academic dishonesty. As Ryan et al. (2009) asserted that students are not aware about campus rules on plagiarism and academic dishonesty. Colleges thus need to pay more attention to this concern and increase educational input regarding academic ethics and allied subjects in undergraduate courses. As the present study found that plagiarism, falsification, lying about academic assignments, outside help and prior cheating was a common occurrence among undergraduate students, workshops or tutorials/seminars about plagiarism and allied types of academic dishonesty are prerequisite to equip them with the academic writing and referencing skills, which they need to complete homework in an ethical manner. To diminish spontaneous and premeditated academic dishonesty practices, several methods can be taken, such as careful exam invigilation and seating order randomization. As Abusafia et al. (2018); Grimes and Rezek (2005); Omoniyi (2014) asserted that college faculty should consider increasing the number of instructors to allow closer observation of students during teacher-administered assessments as well as end term examinations.
2. The results of the present study showed that perception of anomie is very common among undergraduate students which may indicate that students are attributing it to external reason and social environment's effect is considered to be the most important reason. To reduce anomie, several measures can be taken, such as student's participation in basic need oriented activities, task oriented activities, socially oriented activities, oriented towards helping others and society

oriented activities which can be performed in interaction with others, is more likely to reduce anomic feelings. These activities can serve as a source of satisfaction, good feeling, a sense of personal contentment and self-confidence at the individual level. As Quenza (2009) asserted that more conventional activities such as social skills, coping abilities and civic or moral education should concur so as to inform the public about the social psychological problems within society. So, moral education is prerequisite to include in curriculum as Yingli, et al. (2014) revealed that academic moral anomie is very common among undergraduates. Kaufman (1969) recommended that vocational education should be incorporated in the regular so-called academic curriculum so that many of the positive, non-skill characteristics of the vocational curriculum become part of the educational process. So, vocational education may be seen as one method to facilitate the learning of a subject in such a manner that the needs, interests, and aspirations of undergraduate students are satisfied to such an extent that perception of anomie may be reduced.

3. The present study revealed that academic dishonesty among younger undergraduate students is very high. So, college should have conducive environment designed to reduce stress of perpetual anxiety among young academically dishonest students. Teachers need to counter student's problems. It becomes obvious that the college psychologists/teachers can play a pivotal role toward the elimination of troublesome dishonest academic behavior among younger dishonest students. So, one-to-one meetings with undergraduate students will generate a sense of "we-feeling" within the total college milieu and development of vocational and career orientation should help to decrease academic dishonesty among younger students.
4. The current study exposed that academic dishonesty among students from low socio-economic-status families is high as compared to undergraduate students from high socio-economic-status families. So, parents, college teachers, educational planners and society need to find ways to combat dishonest academic acts among low socio-economic-status students. They belong to large group of society who has high aspiration level, achievement stress, lack of fear of punishment and risk taking behavior which encourages them to involve highly on dishonest academic practices. As Pearline (2007); Nzoka (2007); Ukpor (2005)

suggested that low socio-economic-status parents needs to encourage their children imbibe values of work, normful behavior and respect for moral ethics.

5. Multicampus investigation suggests that there is an impact on the amount of dishonesty that occurs in our campuses, but this will certainly take some effort on the part of both students and faculty members. Faculty should inspire student accountability, have frank and open discussions about academic dishonesty, are more willing to respond when students cheat, and focus on ways to engage students and improve teaching, the current culture surrounding dishonesty will start to change. As Abbott, Siskovic, Nogues, and Williams (2000) asserted that old-age concern of academic dishonesty is a pervasive issue that all instructors must face. Hence, the incidents of academic dishonesty can be significantly reduced if instructors are vigilant, proactive and are willing to welcome the challenge of creating ‘cheat-proof’ course materials in campuses. Similarly, Babu et al. (2011) suggested that ethics should be emphasized to the students which might help them in becoming honest, accountable and trustworthy professionals in the future.
6. Since, anomie is positively and significantly correlated with academic dishonesty of undergraduate students. Hence, it is important to develop trust and moral values among students so that they can refrain from dishonest academic practices. As Durkheim (1964) asserted that an internal control mechanism should be generated via normal pressure and informal punishment (e.g., disapproval, criticism). Students should be clear about expectations like honesty, other important values, and the certain consequences they will face in the case of breaking the norms/rules. As a result of such circumstances, Quenza (2009) asserted that the social fabric has eroded and affected the relationships between individuals and society. Hence, because of the important psychosocial consequences of dysfunctional mental health policies, programmes and interventions must assume a wider perspective to include macro-structural aspects such as employment, social participation and opportunities. This perspective should concur with awareness and understanding among students so as to inform the public about the socio-psychological problems within society.
7. Current study revealed that personality hardiness was negatively correlated with academic dishonesty of undergraduate students. Thus, there is a need to strengthen the personality hardiness tendencies among undergraduate students so

that tendency of academic dishonesty may be reduced. As revealed by Kumar (2016) that low self-control students were more involved in academic dishonesty. Hence, it is important teachers should pay individual attention to the students. For instance, helping undergraduate students to acquire personality hardiness may have a buffering effect on the academic stress. Developing human relations skills for harnessing and enriching the internal strengths and capacities may help students remarkably to regulate emotions in a positive direction (Schutte et al., 1998). Also, implementing suitable interventions early in the developmental stage, particularly at primary and secondary school level will help build adequate hardiness and in turn enrich these cognitive self-regulatory, academic and interpersonal capacities, which may help to promote the development of more adaptive coping strategies. As Bansal (2014) asserted that high hardy students performed significantly better on the problem solving ability. So, educators should try to take steps such as motivating and encouraging students and assigning responsibilities to them to develop personality hardiness.

8. Since it was found that contextual influences are positively correlated with academic dishonesty of undergraduate students. Hence, it is duty of parents to reduce pressure, burden of students regarding grade. Similarly, teachers should develop impression on students and undergraduate students should be made aware about institutional policies. More constructive peer communication should develop among students. Bandura (1986) based on Social Learning Theory had suggested that observing peers cheat successfully would have a cascading effect and would increase the tendency of observer students to behave similarly. When individuals are tensed to certain levels especially as a result of lack of preparedness they may take to dishonest behaviours during examinations. Also when the students are provided with cover such as having a large class size or when they are not closely monitored, they are more likely to engage in academic dishonest behaviours. Therefore, government and other stakeholders should evolve strategies to ensure that none of such classes is allowed to take place in order to forestall sanity in educational system. Finally, using a team approach, academic honesty can be endorsed in every campus atmosphere to try to drive away dishonest academic practices. Placing prominence on academic integrity can aid students be the best they can be by just being themselves. The team approach could also work to train parents on the effects of their demands and

high pressure for their students to be the best. The penalties should be the same across the board for all students. Modules should be given on academic integrity and also can be taught so more undergraduate students will want to have an effective environment of integrity.

### **5.3 DIRECTIONS FOR FUTURE RESEARCH**

Constructing new instruments to measure anomie, academic dishonesty and contextual influences in the academics provides numerous opportunities for future research. This study also provides practical directions for future research, as follows:

1. Similar kind of study may be replicated with other populations to look for norms as well as levels of anomie and involvement in academic dishonesty.
2. The survey can be modified to reflect other academic types. This might include government, private or religious settings.
3. The measurement of anomie helps point to practical interventions that can address anomie in the academic context. Using the instrument to measure pre and post intervention anomie is a natural next step in the research of academic anomie.
4. Extensive phenomenological study should be conducted based on these instruments to expose the reasons behind this phenomenon among different cultures.
5. Further research can be conducted to determine the relationship of anomie with contract cheating, socio-economic status, corruption and unemployment in the societies.
6. More attempts at refinement of procedures for measuring anomie, academic dishonesty is definitely in order. More research is needed to understand and respond to the multitude of value orientations among college students particularly among cultural minorities.
7. This study suggests that pre and post intervention personality hardiness should be measured in order to know the effect of research in academic settings.
8. More studies can be done on ways students are cheating. These studies can be done through questionnaires and direct observational studies in the classroom. It would be beneficial to have studies done on the college/school counselor's role in academic dishonesty in the campus/school atmosphere for other college/school counselors to gain a better understanding on how to help their

students and how to educate their students, teachers, administrators, and school board on academic dishonesty.

9. Future research in regards to anomie and academic dishonesty should be conducted in lower levels of education, such as higher secondary, high school and primary school settings, as research in this field is scarce. While it has been theorized that these educational levels have lower degrees of anomie and higher level of academic dishonesty and contextual influences. More extensive research needs to be conducted to validate this claim.
10. Finally, this study suggests that follow up investigation with this study should be conducted in various states of India to get an image of academic dishonesty and anomie .

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- 10 I attempt to make special considerations to attain or getting favors i.e. (bribery).
- 11 In an individual work/assignment I take help from others to complete it.
- 12 I use unfair means to obtain information about the content of the test before it was given.
- 13 Before examination I try to know questions asked in paper.
- 14 I write expected answers on table/wall/hand/paper etc. in prior time.
- 15 I interchange my allotted seat near efficient student to get better grade in examination.
- 16 Before examination I encourage other classmates to do cheating.
- 17 I submit the assignment in my name after getting it prepared by my friends.
- 18 I damage library books so that classmates do not get required content.
- 19 In a course I submit the same educational assignment more than one time.
- 20 I give false explanations when I miss deadline of my educational project.
- 21 I buy a project/assignment/paper online & submit it as my individual effort.
- 22 Before exam I pay someone to write a paper/homework for me.
- 23 I provide false excuses to teacher, to gain extra time on project/assignment.

**Total Academic Dishonesty Score**





- 11 I like to live by society rules.
- 12 I think getting higher education is unimportant for future life plan because it does not pay anything in life.
- 13 If I work hard and study today, I am sure that a job will be open for me later.
- 14 I think the life of an ordinary man is getting worse day by day.
- 15 I think there are no clear rules in recruitment of jobs.
- 16 I think a person's future is determined by higher officials.
- 17 I have no control over my destiny.
- 18 I really do not know what to do with my life.
- 19 I feel lonely and unrelated to my fellow human beings.
- 20 I believe that inspite of one's capability nobody knows what is expected from him/her.
- 21 I often have trouble deciding which rules to follow.

**Total Anomie Score**





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and influence over things that happen to me.

26 If anything else changes or goes wrong in my life right now, I feel that I might be able to effectively cope with it.

27 When change occurs at work or home I often find myself thinking that the worst is going to happen.

28 At the moment, things at work and at home are fairly predictable and any more changes would just be too much to handle.

29 You can't really trust that many people because most individuals are looking for ways to improve their welfare and happiness at your expense.

30 Most of the meaning in life comes from internal, rather than, external definitions of success, achievement and self-satisfaction.

**Total Personality Hardiness Score**



do so.

- 12 I try to pressurize my parents to buy expensive products as my friends ask me to do so.
- 13 I wear dresses as per my friends' liking.
- 14 I try to influence my friend with my ideas.
- 15 I support my friend, whether he/she is right or wrong, just to stay on with my friend's good side.
- 16 I act in a different manners/ways just to impress my friends.
- 17 It is very easy for my friend to get change my mind.
- 18 I fight with my parents because my friends insist me to do so
- 19 My peer group accepts me as the way I am.
- 20 I do not take advice from my parents about peer group activities.
- 21 My friends give me ideas on how to manage my stress.
- 22 I act in the same way when I am alone as I do with my peer group.

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**Peer Influence Score**

- 23 I work hard to achieve high grades because my parents insist me to do so.
- 24 My parents give positive responses on my academic work.
- 25 My parents advise me to take life too much hard for studies.
- 26 When I get success in my work my parents feel

proud of me.

- 27 I follow advice of my parents to adjust with others.
- 28 My parents encourage me to do my work by myself.
- 29 I prefer to take suggestion from parents instead of my friends.
- 30 When I do wrong things my parents criticize me.
- 31 My parents support me when I am sad.
- 32 My parents accept my ideas even when they are different from them.
- 33 When I express my ideas frankly in front of the guests, my parents feel pleased.
- 34 I cannot reject the advice of my parents.
- 35 I take advice from my parents before I purchase any reading material.
- 36 I will follow lifestyle (after intermediate/graduation) similar to that of my parents.
- 37 I can attend parties with my friend after taking permission from my parents.
- 38 I dress up myself as per my parents' liking.
- 39 I like to see movies with my friends but my parents do not allow me.
- 40 My parents put efforts for my better achievement.
- 41 I prefer to follow the vocational area of my parents' choice.
- 42 I follow my family traditions because my parents want me to do so.



- 43 I help my parents in domestic work because they want me to do so.
- 44 My parents encourage me to do my work honesty.
- 45 My life outside the home is under parental screening.
- 46 I follow strict discipline at home.

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**Parental influence Score**

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- 47 The institution gives emphasis on the students to spend a quality time on academic work.
- 48 The institution inspires cooperation and interaction among students.
- 49 In this institution the exchange of ideas is encouraged between teacher and students.
- 50 All teachers have constructive attitude towards quality of learning.
- 51 In this institution faculty members advocate guiding on my academic study.
- 52 All teachers have favorable attitude toward students' questions.
- 53 In this institution all faculty members care about students.
- 54 In this institution faculty members inspire to develop innovative thoughts in classroom.
- 55 In this institution faculty members act as per rules, criteria and policies of the institution.
- 56 While I try to do my work independently my teachers guide me.
- 57 During class students can ask any query from teacher.
- 58 Teachers praise the students for achieving good marks in examination.

- 59 In this institution all faculty members obey the head of the college/school/university.
- 60 Faculty members emphasize on studying learning material provided by them.
- 61 In this institution students' opinions are criticized by the teacher.
- 62 In this institution students' behavior is observed on regular basis.
- 63 Opinions of the students are considered while preparing the rules and regulations of the institution.
- 64 In this institution all teachers encourage students to get better results.
- 65 In this institution strict rules are followed by the teachers as well as students during examinations.
- 66 In this institution I prefer to make my teacher ideal/role model.
- 67 I will follow future lifestyle similar to that of my teachers.
- 68 In this institution teachers guide me in taking decisions.
- 69 Favorable environment is provided to students for skills development/ enhancement.

**Institutional Climate Score**

**Total Contextual influence Score**