

Experimental Investigation on Cheating Behavior Among Students: Girls Vs Boys

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Abstract - Her In this racing world the definition of a successful life is given in the form of materialistic approach rather than moralistic approach. The knowledge of students is solemnly weighted by marks obtained in exams. Due to the transformation people are opting for shortcuts for success. Cheating and lying became a part of living. This paper is a comparative analysis of the cheating behavior between boys and girls through experimental investigation. The experiment is a self designed experiment rooted from Dan Ariely's matrix experiment. The sample (N=100) is taken from colleges in Visakhapatnam. The analysis indicated that 21% of the sample taken were genuine and 78% of the sample were liars. Results indicated that girls exceed boys in cheating behavior.

Keywords: Cheating behavior, experimental investigation, Visakhapatnam.

I. INTRODUCTION

Deceiving also known as cheating behavior can be defined as an act of dishonesty in order to gain something. Cheating behavior as rooted in the social structure just as many other forms of deviant behaviors. (YuliaPoltorak 1995). People try to gain advantage in unfairly means. It became natural and acceptable in our society. Cheating can be of various forms like bribery, nepotism, slaze, cronyism and any situation where individuals are inclined towards by means of inappropriate criteria. Academic cheating is a significantly universal occurrence. Dishonesty commonly called as cheating is a perplexing phenomenon among college students which may take form in many ways like copying from another test, turning inauthentic paper, plagiarizing, sabotaging laboratory experiments, padding bibliographies, theft and stashing of library materials, stealing lecture notes and falsifying transcripts, letters of recommendation using crib notes etc. (Kathryn Louise Holleque ,1982).

Moral development: Inculcating the knowledge and living by a set of values and beliefs that are followed by a community or a group which are in benefit to the society can be known as morality. Morality is an ability developed by humans which distinguishes right from wrong. Moral development mainly focused on the emergence, change and understanding morality from infancy through adulthood. Piaget and Kohlberg both viewed moral development as a result of a deliberate attempt to increase the coordination and integration of one's orientation to the world. Cheating can called as deviant behavior from

morality. Cheating or deviant morality can be developed at any stage of development due to various factors. Until age of 3 children don't develop knowledge of what stealing or lying is and don't do things on purpose. From age 3 children start leaning right from wrong. After 6 they will be clear about lying as a wrong deed. Factors like high expectations for achievement from environment, forbidden from activity, improper disciple methods or negligence and lack of proper guidance and support will lead to development of unethical behavior. Although cheating is generally seen as wrong, students identify many situations in which they feel cheating is acceptable. (1992).

Factors effecting cheating behavior: To understand adult morality, Piaget believed that it was necessary to study both how morality manifests in the child's world as well as the factors that contribute to the emergence of central moral concepts such as welfare, justice, and rights. Development of cheating behavior may be due to "desire to get ahead" (Mark G. Simkin, Alexander McLeod 2009), materialism, religiosity, achievement goals (RavinderKoul). The most likely reason for participation was: "thestudent wants or needs a high grade, "followed by "the student feels there is a low risk of getting caught or punished," and "the student feels no one is hurt by the behavior." The respondents were less likely to use poor instructors, irrelevant material and thrill or challenges are reasons for their unethical academic behavior. (dishonest Practices: dr.Uday S. Tate, Dr. AvinashWaikar, Dr. BobS. Brown, Dr. Suneel K. Maheshwari) to curbthe academic dishonesty, the Indian government passed anact in 1992 providing for stiff punishments, including imprisonment, for cheating (The Economist 1994). However, the administration of higher education has not kept up with this exponential growth (Raza 1991).

II. PREVIOUS WORK

Deceiving undermines the core values of professions for which students prepare, and this behaviour may be carried over from school to college and into professional life (Davis & Ludvigson, 1995; Jones & Spraaakman, 2011). Behaviour of this sought in medical college has been found to be a good predictor of unethical medical practices later on (Hrabak et al., 2004).

Diekhoff et al. (1999) in his studies found that 55% of Japanese students involved in various acts of dishonesty. In another study conducted in Poland by Lupton and Champan (2000, 2002) found 84% of dishonesty rate. Meade (1992) from his previous studies reported dishonesty of 87% among undergraduates from top 31 universities in US. In another study on undergraduate cheating reveals that 65-100% of them are admitted into this behavior for at least one time during their college education (McCabe, 1992; McCabe & Bowers, 1994; Stearns, 1997). 75% of students in higher education admit to cheating behaviors in a survey conducted by the Center for Academic Integrity (Fields, 2003). A report given by Wajda-Johnston, Handal, Braver, & Fabricators (2001) showed 55.1% admitted to cheating pursuing their graduate student career. In another survey done on 144 students by Mark G. Simkin and Alexander McLeod they found that 60% of the business students and 64% of the non-business students confessed to cheating behavior.

Gender and cheating behavior: There is a large literature relating to the influence of gender on academic cheating or dishonesty; the topic has captured the attention of researchers since the pioneering work of Hartshorne and May on deceit and honesty in 1928. (James A Athanasou 2002). In a study conducted among undergraduate students at Hawassa University College of Medicine and Health Science, Hawassa, Ethiopia indicated that a significant number of females reported cheating as compared to males (26.2% females vs. 18.1% males, $p = 0.005$). Similarly in a typical study done by Smith, Ryan and Digind (1972, p.646) on gender differences in deviant moralistic behaviors like cheating in examination they found that 91% of men ($N=44$) and 97% of women ($N=88$) agreed to cheating. In a quantity of studies the section cheating was determined for various situations like that of tests, assignments, plagiarism. where in those cases where more than one proportion was cited, the extent of cheating in a high school or university is used as an indicator for the highest proportion cheating in any one context. For example, the study by Who's Who Among American High School Students (1994) provided details of the proportions of students who copied someone else's homework (male = 63.2%; female = 72.2%), cheated on a quiz or test (male = 42.2%; female = 44.5%), or plagiarized part of an essay (male = 17.9%; female = 14.3%). The highest of the three proportions was used as an indicator of the extent of past cheating in high school. In other studies female students mentioned in a study were more likely to plagiarize (Taylor Bianco & Deeter-Schmelz, 2007; Mirshekary and Lawrence (2009). Roigand-Caso (2005) and Bilic-Zulle, et al. (2005).) In another study conducted in China on Gender difference in spontaneous deception: A hyper scanning study using functional near-infrared spectroscopy they found that the

deception rate is 54.58% in female while compared with 53.08% in males. The behavioral results demonstrated that deception was a common tactic across conditions of the card game task. The deception rate for all trials was 53.08% for males, and 54.58% for females.

The objective of this experimental investigation is to study the cheating behavior among adolescent students in relation with gender in Visakhapatnam region. Based on our findings, we intend to provide baseline evidence of level of cheating behavior and persuade the educational institutions of urgent requirement of necessary measures to be taken in order to decrease unethical behavior developing in students which are carried on to the society.

III. PROPOSED METHODOLOGY

TOOLS USED:

Self designed questionnaire with 40 general questions which even a 4th grade student can answer when time is given, dustbin, and stopwatch.

METHODOLOGY:

The investigation is done on the random stratified sample of 100 members out of which 50 are girls and 50 are boys of age 18-20. Out of the 100 samples 71 subjects involved in the experiment. A questionnaire of 40 questions has been designed which are of 4th grade standard and can be solved easily by the above age sample when time is given. After standardizing, the average time taken to solve the paper has been set as 13 min. The sample was instructed that the time provided for taking the exam will be 3 min. When the provided time is completed they were asked to stop their writing and were strictly monitored so that no member of the sample has a chance to extend their exam. Then the sample were asked to count down the no of questions they have answered correctly which is mentioned as "ACTUAL CORRECT" (AC) in the paper. They were also informed that the top five high scorers are rewarded. After collecting their papers the sample were told that due to lack of time their answers won't be evaluated, and immediately in front of them the answer sheets were torn off and disposed into waste bin and there will be no evidence of their answers with the experimenter. Then they were asked to say how many questions they have answered correctly which is mentioned as "SAID CORRECT" (SC) in this paper.

Trick: The papers were not torn completely- the papers were torn into two halves but we have made sure they have small attachment at the end so that they can be joined together when needed. Later the AC answers with SC answers of the sample were compared. The difference between SC and AC would give us the score of the cheating behavior. The experiment output is categorized into three aspects. 1) Genuine 2) Liars 3) Slackers. If $SC=AC$ then the subject has given exact information

regarding his answers and comes under genuine category. When $SC > AC$ it can be said that the subject has increased his score from what he actually achieved and comes under Liars category. And when $SC < AC$ it is assumed that the subjects have not shown interest in the experiment and are considered as slackers. Therefore the output variables from the experiment were genuine, slackers and liars out of which genuine and liars variables were considered as dependent variables where these two measures will give us required analysis of cheating behavior. The independent variable in the experiment is gender.

Statistical analysis: for the research of gender differences t-test is selected for the analysis and is done by using SPSS tool. The result is explained in terms of means and standard deviation based on the significance level at 95% confidence, i.e. p-value is 0.05.

IV. EXPERIMENTAL RESULTS

From the experiment it has been found that out of 100 sample of students 71 subjects participated in the experiment actively and remaining 29 subjects were considered as non participants and represented as slackers in the paper.

TABLE 1: OUTPUT TABLE

SLNo	Gender	Genuine	% of genuine	Liars	% of liars	Slackers	% of Slackers
1	Girls	4	26.66	29	5.78	17	58.62
2	Boys	11	73.33	27	48.2	12	41.37

Therefore out of total sample 71% were considered as participant and remaining 56% were slackers whose count is not taken into account when analysis the level of cheating behavior in the experiment.

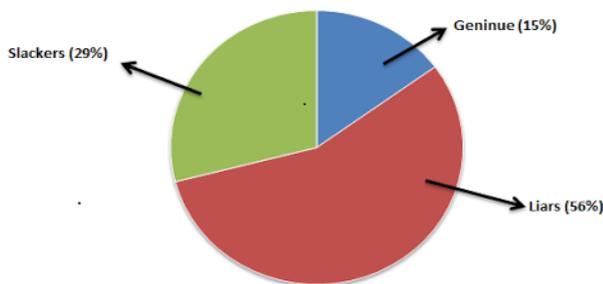


FIGURE 1 : Percentage division of output variables.

Therefore the output variables from the experiment were genuine, liars and slackers were 15%, 56% and 29% respectively. Of total sample 15 were genuine about their performance of which 4 were girls and boys were 11. Total number of liars was 56 and count of girls and boys were 29 and 27 respectively

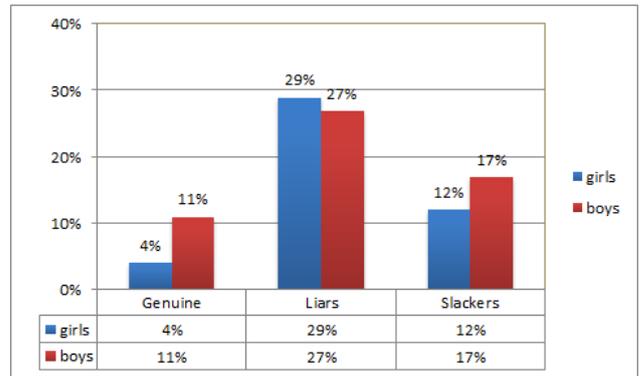


Figure 2: Percentages representation of relation output variables with respect to dependent variable.

Figure 2 show the percentage division of output variables and their relationship with the independent variable where 4% were girls and 11 % were boys. In liar variable 29% were girls and 27% were boys. And in slacker 12% were girls and 17% were boys.

TABLE 2: GROUP STATISTICS

SLNo	Gender	Total difference between SC and AC	No of liars	Mean	Std. Deviation	Std.Error Mean
1	Girls	133	29	4.5862	3.63040	0.67451
2	Boys	71	27	2.6296	1.82184	0.35061

When data analyzed in SPSS (Table 2) the mean of cheating level in girls was found to be 4.586 and boys was 2.669. The significance value $p=0.019 (<0.05)$ indicating that there is a significant difference between cheating behavior between girls and boys. As from means we can assess that cheating behavior is more in girls when compared with boys.

V. ANALYSIS AND DISCUSSIONS:

Analysis of the experiment:

Out of sample of 100 total of 71 subjects have actively participated in experiment and remaining 29 members came under slackers categorization. The main reasons for slacking may be due to low competitive spirit, became uninterested in test for various reasons like uninteresting test paper, inability of taking test or may be volunteered to see the process of experiment.

The experiment was conducted controlling other forms of cheating behavioral acts like coping from other papers or by using technology, getting advantage by taking extra time after completion mentioned exam time and using slips. As in order to avoid copying ample space is arranged in seating arrangement and all electronic gadgets which may become source for cheating are taken, as the sample was collected instantly and the subjects were not aware of the questionnaire beforehand as also the possibility of the above two acts is very low since the time provided for exam is only 3 min. Finally time factor which is the most possible advantage a subject can take is

Carefully controlled by giving strict instructions before starting of exam and also the for 8 subjects one person was allocated for monitoring.

Analysis of result:

From over all sample the percentage division of genuine and liars may give chills if assumed in large scale merging into society. Out of total sample their only 15 % were genuine and 56% were liars. When considering gender percentages with respect actual sample(Fig 3) the percentage of genuine girls was 5.6%, liar girls was 40.3%, genuine boys was 15.5% and liar boys was 38.2% indicating low legitimacy.

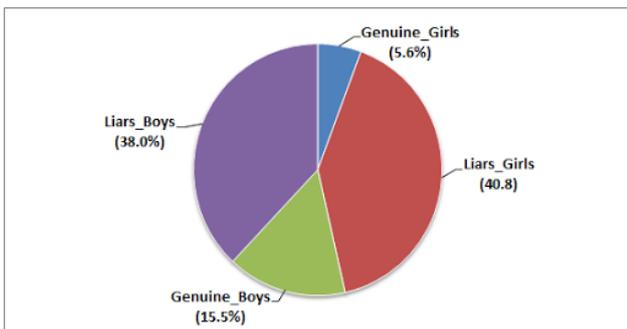


FIGURE 3: Gender percentages with respect to actual sample

Fig 4 analysis which gives the information regarding the gender variation in genuine & liar sample .Total number of genuine are 15 out of which 4 were girls and 11 were boys i.e, 26.66% girls and 73.3 % boys respectively showed genuine behavior indicating girls are low in genuineness when compared with boys. When the liar variable is taken out of 71 participant’s sample 51.78% were girls & 48.22 were boys indicating girls were showing higher cheating behavior

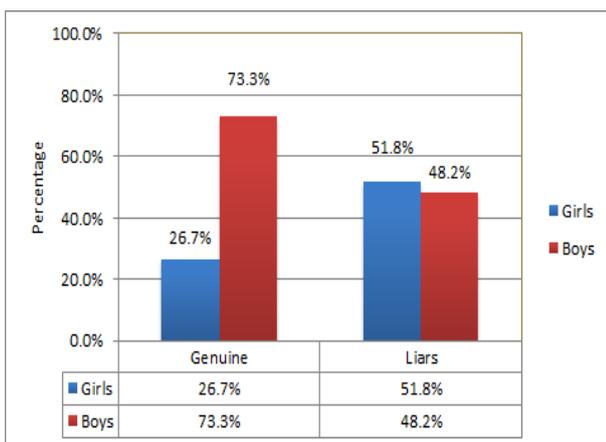


FIGURE 4: Gender percentages with respect to independent variables

From above the result indicated that girls involve in more cheating behavior than boys. As from table 1 we can see that the percentage of girls who are genuine is 26.66% when coming to boys the percentage of genuine is 73.33% which is giving almost 46.6% variation. Even in percentage of liars are taken girls showed more in number

than boys i.e girls 51.78% and boys 48.2%, but the percentage difference between girls and boys in liars categorization is very small. But from table 2 the total difference between SC and AC which gives the level of cheating behavior girls overreached boys. From the analysis of self prepared questionnaires girls overstated their marks than boys. For understanding one girl’s SC answers were 19 but AC answers were 1 i.e difference between SC and AC was 18 which indicate very high level of cheating behavior.

The experiment provided cheating behavior among students in relation with the gender. This experiment can be extended and more précised by concentrating in following areas. In this experiment the basic assumption is all other factors were taken constant except gender. The experiment can be précised when taking factors like socio economic factors, competitive spirit, IQ levels of the subjects are taken into consideration. Similarly the experiment can be extend and study with respect to the factors affecting moral development in humans like age, environmental factors including schooling, parenting, societal expectations etc.

VI. CONCLUSION

Cheating behavior is increasing in this transforming world in various forms when compared with past. When studied in adolescent student sample girls are developing more unethical behaviors than boys. Necessary action is to be taken by the educational institutes, parents and society before the behavior is accepted and gets conditioned.

VII. FUTURE SCOPES

This research has been done on small sample but in order to generalize the conclusion it should be further carried on large sample and should see whether the result obtained can be supported or if not what are the factors contributed in obtaining this result. Furthermore this research can be further extended in finding the factors affecting the cheating behavior.

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