



## Predicting Academic Cheating Among the Fifth Grade Students: The Role of Self-Efficacy and Academic Self-Handicapping

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### ABSTRACT

The main purpose of this study was to predict academic cheating, based on some personal factors (self-efficacy and self-handicapping strategies). 477 students from fifth grade were selected by random cluster sampling method. To measure the research variables, were used the three sub-scales of Patterns of Adaptive Learning Scale (Midgley et al, 1997). Data were analyzed using descriptive statistics, Pearson correlation, analysis of variance and multiple regression analysis by using software SPSS17. Findings showed that there is significant difference ( $P < 0.01$ ) between the mean scores of male and female students in self-handicapping strategies and self-efficacy. While, between male and female students were not found significant differences in terms of cheating. Also, with the 2tailed test, at 99% confidence level ( $P < 0.01$ ) was found a significant inverse relationship between academic self-efficacy score and cheating score ( $r = -0.28$ ), also, was found a significant positive relationship between self-handicapping strategies scores and cheating score ( $r = 0.29$ ). Finally, using multiple regression analysis revealed that between the two variables, the self-handicapping strategies were the best predictor of academic cheating. Findings and implications for use in educational environments have been discussed.

**Keywords:** Academic Self-efficacy, Self-handicapping Strategies, Cheating.

### INTRODUCTION

Cheating is defined as "to use any means to achieve an unfair and unjust privileges that include: lying, concealing the truth, deceive, deceit and violation of trust" (Romney & Steinbart 2003). However, in test situations, the term means is a violation of rules. As Wilkinson (2009) has stated cheating means copying from other students during exams, one of the forms of misconduct that has become one of the biggest concerns of educational institutions. Previous research shows that academic cheating is a serious problem in all educational levels in the entire world (Mc Cabe, Terivino, & Butterfield, 2001).

Research in this area have shown that one-third of elementary students are engaged in cheating and the rate dramatically increases when they entry into the higher classes, and in high school reaches its peak (Cizek, 1999). Recently, a survey have been conducted on more than 3,000 fourth-to seventh-grade students revealed that more than one in five students admitted cheating on exams (Sing Tao, 2008, as cited by Nora and Zhang, 2010).

At the university level, between 67 to 86 percent of students, and men more than women, are involved in cheating, (De Lambert, Allen, and Taylor, 2003). Cizek (1999) in a review of research literature related to gender differences in cheating, has concluded that during the elementary grades, there is little evidence about gender differences in cheating. Other researchers (e.g. Murdock, Hale, & Weber, 2001; Anderman, Griesinger, & Westerfield, 1998; Anderman & Midgley, 2004) also have not found sex differences among secondary school students. However, research conducted on high school shows that more boys than girls are attempting to cheat (Cizek, 1999). This is an

issue that has also been approved by Anderman & Midgley (2004). In a longitudinal study they showed that the cheating rate increases at the end of eighth grade and ninth grade.

Cheating can be considered as one of the most important issues in schools, because it is a major obstacle to infer the competence of the students. For example, if a student is not eligible for academic courses may be passing the course by cheating and improper ways. Cizek (2003, p. 364) argues that if students attempt to cheating, scores showed no progress in their educational tasks and these scores, does not provide the accurate information (valid) about their knowledge and skills. However, identifying cheating, in particular, is important because shows the extent of this phenomenon and its growing status (McCabe et al, 2001). While most research related to the Cheating have been investigated its relationship with individual characteristics and motivational factors, some studies have examined situational factors related to Cheating. However, few of these studies have been based on theoretical concepts or educational theories (Murdock & Anderman, 2006).

Studies have shown that self-handicapping strategies related to academic cheating behaviors (eg, Anderman et al, 1998). Covington (1992) had played a major role in explaining the self-handicapping strategies. His theory about self-worth, states that students trying to maintain a positive image of themselves and avoid getting stupid label. One way that students can thereby avoid the label stupid, is use of the academic self-handicapping strategies. He defined self-handicapping as "make some real or perceived barriers to their performance". The student uses these strategies to bring an excuse for his future failures. One of the most common self-handicapping strategies is procrastination. Using this strategy, the student to postpone the homework for a non-legitimate reason, or spends all his time to vanity and does not devote enough time to study (Ibid, 1992). For example, students say if the study were not put to last minutes could earn good grades, such strategies are being used.

Another self-handicapping strategy is setting unattainable goals, until he fails in a difficult task, able to defend his own worth. The next strategy, refuse an assignment through trivialize it, in case of failure in those tasks to attribute the failure not to lack of ability, rather than reject the assignment. All these strategies can help students maintain their personal values. However, although these strategies are palliative, but eventually reduce student performance (Covington, 1992).

Anderman and Colleagues (1998) found that self-handicapping strategies, are positively associated with cheating. They stress that these debilitating strategies may encourage students to cheating and finally seem to deserve. Also, Midgley and colleagues (1997), in their study found that students who seeking to prove their competence through their involvement in handicapping strategies, may be consider cheating as an appropriate way to achieve this goal.

Perceived academic self-efficacy is another motivational variable that is expected to be associated with cheating. Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes (Bandura, 1994). Accordingly, people with high efficiency sense, to ensure their capabilities, they consider difficult assignments as the challenges that must be dominated rather than as threats that need to be escaped from. (Ibid, 1994). Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They heighten and sustain their efforts in the face of failure. They quickly recover their sense of efficacy after failures or setbacks. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression (Ibid, 1994).

In contrast, people who doubt their capabilities shy away from difficult tasks which they view as personal threats. They have low aspirations and weak commitment to the goals they choose to pursue. When faced with difficult tasks, they dwell on their personal deficiencies, on the obstacles they will encounter, and all kinds of adverse outcomes rather than concentrate on how to perform successfully. They slacken their efforts and give up quickly in the face of difficulties. They are slow to recover their sense of efficacy following failure or setbacks. Because they view insufficient performance as deficient aptitude it does not require much failure for them to lose faith in their capabilities. They fall easy victim to stress and depression (Ibid, 1994).

In several studies (eg, Bong, 2008; Marsden, Carroll, & Neill, 2005; Murdock et al, 2001) indicated that perceived academic self-efficacy has a negative relationship with cheating behaviors. According to Medley and colleagues (1997) Students who consider themselves underestimate, And have low levels of perceived self-efficacy, look for to prove their competence to others and may be susceptible to cheating in school and use of self-handicapping strategies.

In general, it is important to address the academic cheating behavior because based on research literature, people who have the academic cheating, in most cases, after graduation, bring such inappropriate behavior to their

working environment as well (Chapman, Davis, Toy & Wright, 2004). On the other hand, though, in many countries, factors related to academic fraud, had been considered by researchers, but in Iran, little research has been done in this area. So, further research will be requires to investigate factors related to cheating among students-especially in primary level.

Therefore, in this study, have been studied cheating behaviors of fifth grade students in association with some of the individual factors. The research hypotheses were:

- There is difference between male and female students in academic cheating.
- Self-handicapping strategies and self-efficacy have relationships with Cheating.
- These factors, predict cheating behaviors in fifth grade students.

## METHODS AND MATERIALS

Statistical society of the research includes all students of primary-schools of Yazd in 2009-2010. For selecting the sample we used random cluster sampling method. Based on this method were selected 476 students (125 boys/ 352girls).

In this study was used Patterns of Adaptive Learning Scales (PALS) (Midgley et al, 1997). The questionnaire includes 26 scales and in this study were used three scales. The students were asked to respond on a Likert scale of 5 degrees of "completely false to completely true". According to Midgey and colleagues (1997) PALS is appropriate at both elementary and secondary level and over the past decade has been used in several studies. Construct validity of this scale has been confirmed in several studies (eg, see Midgley and Urdan, 2001; Bong, 2008, Wolters, 2004). Also, the Cronbach's alpha reliability for the original form of the questionnaire is calculated by the authors (Midgley et al, 2000) on a sample of elementary school students. They have mentioned alpha coefficient of this questionnaire in the range of 0.7 to 0.9. Also, the reliability of this questionnaire was measured by the researchers of this article in a sample of elementary students in Yazd city. Cronbach's alpha coefficients for the subscales of the questionnaire were obtained in the range of 0.55 to 0.85.

In order to test research hypothesis, were used analysis of variance, correlation coefficients and multiple regression analysis. Multiple regression analyses were used to explain and predict criterion variable by the use of predictor variables. For assessing significance of regression model we used F test, and statistical T test was used to determine significance of Beta coefficients. Also used all of the statistical calculations were done by the use of SPSS statistical software version 17.

## RESULTS AND DISCUSSION

The result of one-way analysis of variance showed that there is significant difference between boys and girls in academic self-efficacy ( $P=0.001$  &  $F=16.55$  (475 and 1), and self-handicapping strategies ( $P=0.001$  and  $F=16.33$ (475 and 1). Accordingly, the girls have a stronger sense of self-efficacy than boys. However, more boys than girls, to use the self-handicapping strategies. As shown in Table 1, mean score of boys in academic cheating is slightly higher than the girl's scores, but the difference between the scores of boys and girls, was not significant statistically.

To examine the relationship between variables, Pearson correlation coefficients were calculated. As shown in Table 2, with two tailed test at 99% confidence level ( $P<0.01$ ) exists a significant inverse relationship( $r= -0.28$ ) between academic self-efficacy score and Cheating score. Namely, the higher level of this variable, the cheating less occurs. Also, by two tail test at 99% confidence level ( $P<0.01$ ), there is a significant direct relationship between scores of self-handicapping strategies and academic Cheating score. In other words, the higher the level of the, most cheating occurs.

**Table 1.** Comparison between boys and girls in cheating behavior

variable	Boys	Girls	F	df	P
Cheating					
Mean	4.85	4.74	0.236	(1 & 475)	0.627
SD	2.22	2.21			

**Table 2.** Correlation matrix of variables

Variables	Self-efficacy	Self-handicapping
Self-efficacy	1	
Self-handicapping	-0.29**	1
Cheating	-0.28**	0.29**

As tables 3 and 4 show, academic self-efficacy and academic self-handicapping strategies to be the predictors of academic cheating. The direction of beta coefficients indicates that academic self-efficacy is negative; thus, the variable has a negative role in explaining and predicting academic Cheating. On the other hand, the positive beta

coefficient of self-handicapping strategies indicates that this variable has positive role in predicting cheating among students.

**Table 3.** Results of multiple regression analysis to predict academic cheating

Model	Correlation coefficient	Coefficient of determination	F	Significant level
1	0.36	0.13	34.58	0.001

**Table 4.** Beta coefficients and t tests for predictor variables

Variables	Unstandard Coefficients		Standard coefficients	T	Significant level
	B	Standard error	Beta		
Constant	5.82	0.66		8.78	0.001
Self-efficacy	-0.13	0.026	-0.21	-4.78	0.001
Self-handicapping	0.11	0.021	0.23	5.15	0.001

The findings of this study show that gender has not an important role in cheating. The finding is repeated by other studies (such as Murdock et al, 2001; Anderman et al, 1998; Anderman & Midgley, 2004, and Cizek, 1999) which have shown there is no statistically significant difference between girls and boys in academic cheating.

Findings also revealed that academic cheating has significant negative relationships with self-efficacy and positive relationships with self-handicapping strategies. The findings of this study are clearly in line with recent research. For example, Nora and Zhang (2010) have shown that students with low self-efficacy compared to other students who have higher self-efficacy more likely to engage in cheating. These findings are repeated by other research (eg, Murdock et al, 2001; Finn & Frone, 2004). Efficacies beliefs determine how people feel, think, behave, and motivate about themselves. Such beliefs create these various effects through four main processes that include cognitive, motivational, emotional and selective processes (Bandura, 1994). Low self-efficacy represents a lack of belief in his ability to perform tasks correctly and optimal which is essential for high performance (Murdock, et al, 2001). So the cheating can be linked with low self-efficacy, because the student's doubt about his ability to create desired results, can lead to rely on the other strategies (for example, cheating) for success (Murdock et al, 2001). In other words, when students have high self-efficacy beliefs and expect to succeed at an academic task, cheating is probably neither a necessary nor useful strategy (Murdock & Anderman, 2006).

Another variable examined in this research, was self-handicapping strategies that based on the results of this study it was found that has a significant positive relationship with cheating. This result was repeated in some studies. For example, Roig and De Tommaso (1995) have been found that procrastination (one of self-handicapping strategies) had a positive relationship with cheating in tests and plagiarism in a sample of university students. Anderman et al (1998) also found this negative relationship between self-handicapping and cheating in a sample of secondary students. Self-handicapping strategies are used when students actively to set the conditions related to the academic success and failure, so that he/she can attribute failure to these conditions than the ability (Garcia & Pintrich, 1993). Self-handicapping strategies include behaviors such as ashamed others for failure or apologize for not having the proper performance (Urda, Midgley & Anderman, 1998). Can be said that self-handicapping and cheating, are strategies that students are used to be efficient from the perspective of others (Anderman et al, 1998).

Other item covered in this study was predicting academic cheating based on the research variables (self-efficacy and self-handicapping strategies). The findings suggest that both self-handicapping strategies and self-efficacy beliefs are predictors of academic cheating. Academic self-efficacy, negatively and self-handicapping strategies positively predict academic cheating. These results have replicated the findings of other studies about the predictive role of the variables in the academic cheating. Thus, self-handicapping strategies (For example, Roig & De Tommaso, 1995; Anderman et al, 1998), and low self-efficacy (for example, Finn & Fron) are predictors of academic cheating.

The findings of this study have clear implications for design effective learning environments. Students may react to some personal characteristics such as low self-efficacy, or self-handicapping with academic dishonesty behaviors such as cheating (Murdock & Anderman, 2006). Therefore, Teacher's task is to create a positive atmosphere in the classroom because the classroom environment played an important role in motivation, engagement, and academic achievement of students (Patrick, Kaplan, and Ryan, 2011). Also educators have the responsibility to employ strategies to increase self-efficacy, such as setting reasonable levels of acceptable performance and rewarding students at all achievement levels for hard work and learning (Finn & Frone, 2004). On the other hand, when students perceive that they are being evaluated on the basis of their ability relative to the ability of others, they may be more likely to use self-handicapping strategies than when they perceive they are being evaluated in terms of their effort, improvement, and mastery of the work (Midgley & Urda, 1995). So, as far as is relevant to the findings of this

research, academic cheating can be reduced through improved feelings of efficacy and reduced use of academic self-handicapping strategies.

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