Prediction of academic self-handicapping based on self-control among university students

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Abstract

The study examined the predictive ability of self-control of academic self-handicapping among university students. The sample of the study consists of (130) students from a public university, selected randomly. To achieve the study objectives, a survey was employed to collect data. It included a self-control scale and an academic self-handicapping scale. The mean, standard deviation, t-test and multiple analysis regression were used to analyze the data. The results of the study revealed that academic self-handicapping and self-control levels among BAU students were moderate. There were no statistically significant differences in academic self-handicapping level due to gender, while there were differences in self-control level due to gender in favor of females. The results also revealed that self-control is a significant predictor of academic self-handicapping. The study recommended improving self-control especially among male students as it affects their low-level of self-handicapping.

Keywords: Academic self-handicapping; Jordanian universities; Self-control; Self-control among university students.

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1. Introduction

The university study stage is one of the most important stages in students' life due to the large number of changes and developments that occur in their personality, decisions and ways of thinking. As a result of a variety of demands, needs, and goals and numerous problems associated with academic performance, students may resort to using academic self-impediment as a strategy to prevent the threats to their self-concept. This can be because of their fear of academic failure in future educational positions. The availability of acceptable levels of self-control among students may enable them to reduce the use of academic self-obstruction strategies, control educational situations, and deal with academic pressures that are expected to impede their cognitive development and psychological and social adaptation**.**

1.1 Theoretical Framework

Academic self-handicapping is seen as one of the relatively recent topics in the humanitarian field. Berglas and Jones (1987) reported that individuals, who do not trust their competencies, attribute their failure to external factors. In this sense, handicapping is an option an individual selects. There are many terms to describe self-handicapping such as self-sabotage, self-protection, self-enhancement (Török et al., 2018). The present study adopted the term academic self-handicapping which was used to explain many of the academic aspects related to learner's personality. It revealed when the learner faces obstacles that prevent him from achieving his goals (Zarshenas et al., 2019). Academic self-handicapping is defined as "students' use of various strategies to justify their academic failures, as a means by which the relationship between academic performance and personality can be blurred" (Akin & Abaci, 2011, p. 33). Török et al. (2018) also defined academic self-handicapping as "an action used by individuals to handicap their success, through imposing difficulties in important situations of performance". As for Falconer and Djokic (2019), the term academic self-handicapping is a self-destructive behavior used by students to justify their failure in the different academic tasks. Berglas & Jones (1987) asserted that individuals resorting to academic self- handicapping are those who care more about the type of performance they present in the various academic setting but when doubting the probability of their success, they put barriers impeding their performance, especially in new academic situations. In the same vein, Schwinger et al. (2014) postulated that the term academic self-handicapping is a strategy students use to justify the predicted or unpredicted failure as a result of the belief in their abilities. Yıldırım and Demir (2020) contend that academic self-handicapping leads students to develop a set of barriers as a means to protect self-efficacy, which therefore causes to the failure to perform tasks successfully.

Individuals with the least experiences of failure are more likely to use academic self-handicapping. Emphasizing this, Eyink (2019) contended that high achieving students are a significant example of this as they cannot accept the idea that they may fail. The classification of academic self-handicapping varied from the different verbal and behavioral perspectives. From a verbal point of view, students attribute their failure using

external causes, such as health problems. According to Akca (2012), academic self-handicapping has been classified into two types: behavioral and verbal, according to the way it is done. External reasons, such as health problems and other types affect the student's performance. As for Eyink (2019), he divided academic self- self-handicapping according to the source of the behavior into internal, related to the individual himself, his quest to protect his self-image and self-esteem, and external related to others, that is, the individual seeks to maintain the positive impressions that others have of him. Akin (2012) pointed out to a variety of variables associated with the use of self-handicapping strategies such as, low self-esteem, social anxiety, introversion, self-determination, inability to adapt, performance goals, academic achievement, and low achievement. Although self-handicapping strategies may protect short-term self-esteem, long-term self-handicapping affects poor health and decreased well-being, decreased satisfaction with competence, decreased intrinsic motivation, and recurs negative moods, symptoms, and burnouts.

Regarding the relationship correlation between academic self-handicapping and self-control, they have also been examined and it was revealed that the low levels of self-control predict the academic self-handicapping (Uysal et al., 2012). In the same line of research, Mehta (2010) argued that self-control is one of the mechanisms individuals develop since early age in order to understand and adapt to the world and looked at self-control as human development's most powerful and useful components.

Several definitions have been presented in the psychological literature for the concept of self-control. For instance, self-control was defined by Duckworth et al. (2016) as the voluntary organization of thoughts, actions and conflicted feelings corresponding to the long-term goals. It is individual's ability to impede or refrain from showing undesirable behavioral tendencies (Tangney et al., 2004). According to Peterson and Seligman (2012), self-control refers to how an individual controls his behavior in order to fulfill his objectives and meets standards level. Baumeister et al. (2012, p. 351) also defined self-control as "the ability to change an individual's responses to bring them in line with standards such as, ideals, values, morals, social expectations and supporting the fulfillment of long-term goals".

People with high levels of self-control are often burdened with negative social contact, such as "excessive restriction, caution, tension, and lack of spontaneity" (Peterson & Seligman, 2012). Tough (2016) stated that individuals' high levels of self-control tend to show that they possess better interpersonal skills, fewer symptoms and great levels of self-esteem, since they are less likely to drink alcohol and use drugs. Furthermore, Engels et al. (2000) and Englert and Bertrams (2015) reported that individuals, who scored higher in self-control are more likely not to engage in aggressive and disruptive behaviors, are more successful regarding interpersonal relationships. They often show more harmony with self and society. They tend to be less vulnerable to commit abuse and show ability to manage stress and protect their mental health.

1.2 Related Studies

Several studies have examined the relationship between self-control, academic self-handicapping and different cognitive, behavioral, emotional and psychological variables. Nonetheless, few studies have examined the relationship between these two variables, self-control and academic self-handicapping, particularly among Arab university students. In one rare study, Zhu et al. (2016) investigated the relationship between self-control and academic self-handicapping among (94) university students in Australia. They found that self-control was a significant predictor of academic self-handicapping. Another study by Sultan and Kanwal (2014) sought to find out the nature of the relationship between academic self-handicapping, self-esteem and fear of negative assessment according to gender among a sample of (219) Pakistani university students. The researchers found a positive correlation between academic self-handicapping, self-esteem and fear of negative assessment which was stronger for male students. In Turkey, Yavuzer (2015) reported that self-control was a predictor of cognitive distortions among university students. The findings also showed that self-control and cognitive distortions can be predicted through using academic self-handicapping. A sample of (749) Jordanian university students was employed by Al-Rabee and Atyyeh (2016) to investigate the relation between self-control and emotional balance. The study concluded that self-control was related to high levels of emotional balance. In the same line, Wang et al. (2017) examined the age and gender differences in self-control in China among a sample consisted of (2910) teenagers. The findings revealed that males showed higher levels of self-control than females, in the age group (12-17) years, then it decreased.

Using a sample of (300) Jordanian universities students, Ghanem (2017) examined the correlation between the academic self-handicapping and superficial and deep learning styles. The findings showed that the level of academic self-handicapping among students was moderate, and there were statistically significant differences in the level of academic self-handicapping due to gender in favor of males. Akar et al. (2018) examined the relationships between negative positive perfectionism, academic self-handicapping and self-efficacy among (350) students at a Turkish university. The findings showed that there was a negative correlation between positive perfectionism and academic self-handicapping while they revealed a positive correlation between negative perfectionism and academic self-handicapping. As seen, previous studies showed that low levels of self-control are associated with behaviors such as test cheating (Tangney et al., 2004), lack of mindfulness (Franklin et al., 2012), alcohol drinking, drug abuse and sadness (Williams & Williams, 2012), and risky and exciting behaviors (DeLisi et al., 2010).

After reviewing previous studies, it can be noticed that a few studies have focused on self-control among college-students. For instance, Zhu et al. (2016) focused on self-control while Al-Rabee and Atyyeh (2016) examined the emotional balance and self-control. Wang et al. (2017) examined the gender and age differences in self-control. While other studies have examined the academic self-handicapping. For instance, Sultan and Kanwal (2014) focused on the gender differences in the relationship between academic self-handicapping. Yavuzer (2015) examined the relationship between cognitive distortions. Kalyon et al. (2016) aimed to study academic self-handicapping with relation

to sensitivity to anxiety, social support and academic achievement. Ghanem (2017) examined the level of academic self-handicapping and learning method. Akar et al. (2018) examined negative and positive perfectionism with relationship to academic self-handicapping. It was also noticed that not all of these studies have dealt with the relationship between self-control and academic self-handicapping among any social category. According to researcher's limited knowledge, the present study is one of the pioneering studies at both domestic and Arab levels, which might have tried to identify the predictive ability of self-control of academic self-handicapping among Arab students specifically in Jordan.

1.3 The Problem and Questions of the Study

The literature related to self-control suggests that studies which examined the predictive ability of self-control to academic self-handicapping among a sample of community members according to gender are rare. Furthermore, the studies which addressed the differences between males and females gave contradictory results which showed that there is a need for the present study to answer a set of questions:

1. What is the level of academic self-handicapping among Irbid College students?

2. What is the level of self-control among Irbid College students?

3. Are there statistically significant differences at (0.05) in the level of academic self-handicapping and self-control among Irbid College students in light of gender?

4. What is the predictive ability of self-control and academic self-handicapping among Irbid College students?

2. Method

A survey design was used to examine the effects of the independent variable 'self-control' on the dependent variable 'academic self-handicapping'.

2.1. Research Sample

The sample of the study consisted of (130) students of IUC. Convenient sampling procedure was employed in the selection of the study sample. Table 1 displays the distribution of the sample in relation to gender.

Table 1. Frequency and percentage due to gender

Gender	Frequency	Percentage%
Female	98	75.4
Male	32	24.6
Total	130	100.0

Table 1 shows that the number of male students is (32) which makes (24.6%) of the total study sample, while the number of female students is (98) which makes (75.4%) of the total sample.

2.2. Research Instruments

The following scales were employed to collect data from the sample of the study.

2.2.1 Academic Self-Handicapping Scale

The present study adapted Ghanim's (2017) scale to assess students' academic self-handicapping level. The scale consisted of (12) items targeting revealing the level of academic self-handicapping among IUC students. In the present study, face validity of academic self-handicapping scale was obtained by giving the scale to a panel of (8) faculty members specializing in education and psychology at IUC to give their opinions about language, items clarity, the belonging of items to the domains and to give their remarks. The number of the items in their final format consisted of (12) items. Furthermore, in the current study, reliability of academic self-handicapping scale was verified using Cronbach's Alpha for internal consistency. The scale was administrated through a time interval of two weeks on a pilot sample consisting of (46) students. Test-retest reliability was (0.84), and Cronbach internal consistency coefficient was (0.88), which is adequate to accomplish the objectives of the current study.

2.2.2 Self-control Scale

Tangney et al. (2004) self-control scale was used in the study. It consisted in its preliminary format of (36) items. It was adapted to the Arabic culture by Al-Rabee and Atyyeh (2016). In this study, face validity of self-control scale was obtained by giving the scale to a panel of (9) faculty members specializing in the fields of education and psychology at IUC to give their opinions about language, items clarity, the belonging of items to the domains and to give their remarks. The number of the items in the final format consisted of (35) items. Furthermore, reliability of self-control scale was checked using Cronbach's Alpha for internal consistency, which was (0.84). As for scale reliability, it was administrated through a time interval of two weeks on a pilot sample consisting of (50) students. Cronbach's internal consistency coefficient was (0.84), which is adequate to achieve the objectives of the current study.

2.3. Procedures

The current study consisted of the following variables: demographic variables (gender), and Independent variables (self-control, academic self-handicapping). To answer the first and second questions of the study, means and standard deviations were calculated, and to answer the third question t-test was used to define the differences in academic self-handicapping and self-control among IUC students based on gender. While multiple analysis regression was used in order to answer the fourth question. The study was carried out according to the following procedures. After reviewing the previous studies, the study tools were formulated to verify their psychometric properties, and then the number of the study community members was counted by referring to the admission and registration department at Irbid University College, in the academic year 2019/2020. The study tools were distributed to the study sample, giving them enough time to answer the standards, to clarify the goals and importance of the study. The application time took

from (10-20) minutes. A questionnaire on the sample of the study was selected in an accessible manner, and after ensuring the validity of the data for the purposes of statistical analysis, (10) of the questionnaires were excluded due to lack of answers and stereotyping in them. At the end, (130) questionnaires were proceeded to conduct statistical treatment using statistical analysis (SPSS).

2.3.1 Statistical Analysis

To answer the first and second questions of the study, means and standard deviations were calculated. And to answer the third question, T-test was used to define the differences in academic self-handicapping and self-control among Irbid University College students based on gender. While multiple analysis regression was used in order to answer the fourth question.

2.4 Study Limitations

The importance of the study stems from the fact that it attempted to identify the nature of the relationship (if any) between academic self-handicapping and self-control. Identifying this relationship may help in drawing the attention of those who are interested in the educational process in universities to the need to build develop a counseling program aims to reduce academic self-handicapping. Additionally, it will steer educators to the need of using educational methods that can improve self-efficacy among students.

This study was conducted in the summer of 2019/2020 year. It used academic self-handicapping and self-control scales. Thus, the results are limited to the psychometric properties of these two scales. The sample of the study was confined to students of Irbid University College (IUC), and therefore the generalization will be limited to individuals similar to the characteristics of the individuals to whom the study will be applied.

3. Result

The findings are presented according to the research questions as follows:

3.1. What is the level of academic self-handicapping among IUC students?

The first question states "What is the level of academic self-handicapping among IUC students?". The means and standard deviations for the level of self-handicapping among IUC students were calculated to answer this question as seen in Table 2.

Table 2. Levels of academic self-handicapping among IUC students

Rank	No.	Items	Mean	SD	Level
3	1	I find myself confused when I try to do something	3.28	1.245	Moderate
2	2	I find myself unable to retrieve information when taking the test	3.46	1.215	Moderate
11	3	I can concentrate on the subject I study	2.51	1.066	Moderate

Rank	No.	Items	Mean	SD	Level
1	4	Academic overload stresses me so I find it difficult to accomplish something	3.66	1.111	Moderate
4	5	Problems that I can't control appear when I want to study	3.22	1.183	Moderate
12	6	I show interest towards any subject I study	2.21	1.090	Low
6	7	I do not enjoy my weekend due to study	3.01	1.217	Moderate
5	8	I lack adequate commitment to dedicate myself to study	3.08	1.201	Moderate
9	9	My emotions prevent me from completing my achievements	2.93	1.246	Moderate
8	10	I face problems in understanding some subjects	2.95	1.209	Moderate
7	11	I hope that others don't have high expectation about me	2.96	1.254	Moderate
10	12	I feel I waste time studying the wrong subjects	2.83	1.382	Moderate
		Academic Self-handicapping	3.01	.642	Moderate

Table 2 showed that the means scores ranged between (2.21-3.66) for item (4) stating "Academic overload stresses me, so I find it difficult to accomplish something" and it was ranked first (M = 3.66), while item (6) which states, "I show interest toward any subject I study" was ranked last (M = 2.21). Also, the total means score of academic self-handicapping was (3.01), with moderate level.

3.2. Level of self-control among IUC students?

To answer the second question which states, "What is the level of self-control among IUC students?", the means and standard deviations for the level of self-control among IUC students were calculated, as seen in Table 3.

Table 3. Levels of self-control among IUC students ranged according to means

Rank	No.	Items	Means	SD	Level
6	1	I keep my appointments with others	3.85	1.182	High
9	2	I'm a dependable person	3.74	1.178	High
1	3	I refuse things that hurt me	4.08	1.227	High
5	4	I'm punctual	3.87	1.123	High
7	5	I'm able to resist temptations	3.79	1.231	High
10	6	I'm able to work effectively to achieve long-term objectives	3.72	1.101	High

Rank	No.	Items	Means	SD	Level
17	7	I'm an organized person	3.35	1.106	Moderate
13	8	Others think I have strong self-discipline	3.48	1.149	Moderate
34	9	I'm self-control	2.55	1.246	Moderate
15	10	I wish to have more self-discipline	3.37	1.246	Moderate
21	11	Others can't demotivate me easily	3.15	1.060	Moderate
26	12	I spend a lot of money	2.91	1.406	Moderate
19	13	I have difficulty waking up early	3.20	1.116	Moderate
22	14	Engaging in interesting activities inhibits me from getting work done well.	2.97	1.364	Moderate
27	15	My emotions drive me easily	2.91	1.184	Moderate
30	16	I find it difficult to concentrate	2.72	1.288	Moderate
24	17	It is better not to think much before acting	2.96	1.248	Moderate
31	18	I do exercises	2.72	1.181	Moderate
32	19	I change my mind a lot	2.70	1.407	Moderate
23	20	I delay my academic work to the last minute	2.97	1.213	Moderate
33	21	I'm unable to break bad habits	2.61	1.217	Moderate
35	22	I do things without planning	2.46	1.313	Moderate
29	23	I'm easily irritated	2.84	1.180	Moderate
28	24	I'm unable to object others	2.87	1.296	Moderate
25	25	Others think that I'm impulsive	2.94	1.380	Moderate
20	26	I rush to do something even when I recognize it is wrong	3.17	1.208	Moderate
18	27	I act without thinking of all options available	3.28	1.370	Moderate
14	28	I'm lazy	3.41	1.231	Moderate
16	29	I do some bad things if it was fun	3.36	1.353	Moderate
11	30	I tell all my secrets without thinking	3.58	1.206	Moderate
12	31	I believe I indulge in pleasures	3.50	1.253	Moderate
8	32	I believe I interrupt others	3.79	1.212	High
3	33	I discuss inappropriate things	3.96	1.383	High
4	34	I easily divulge secrets	3.88	1.423	High
2	35	I take medication excessively	4.07	1.087	High

Rank	No.	Items	Means	SD	Level
Total score		Self-control	3.28	.475	Moderate

Table 3 showed that the means scores ranged between (2.46-4.08), for item (3) which states, "I refuse things that hurt me" and it was ranked first (M = 4.08), while item (22) which states, "I do things without planning" was ranked last (M = 2.46). Also, the total means score of self-control was (3.28), with moderate level.

3.3. Differences at (α = 0.05) in the level of academic self-handicapping and self-control among IUC students in light of gender?

To answer the third question which states, "Are there statistically significant differences at (α = 0.05) in the level of academic self-handicapping and self-control among IUC students in light of gender?", the means and standard deviations for the level of self-handicapping and self-control among IUC students in light of gender were calculated. To identify differences between the means scores, T-Test was used as seen in table 4.

Table 4. The effect of gender on the levels of academic self-handicapping and self-control among IUC students

		Number	Means	SD	T	DF	Sig.
Academic Self-handicapping	Female	98	2.95	0.617	-1.862	128	0.065
	Male	32	3.19	0.692			
Self-control	Female	98	3.33	0.489	2.250	128	0.026
	Male	32	3.12	0.393			

Table 4 revealed no statistically significant differences at (α = 0.05) due to the effect of gender in the level of academic self-handicapping.

3.4. The predictive ability of self-control of academic self-handicapping among IUC students?

To answer the fourth question which states, "What is the predictive ability of self-control of academic self-handicapping among IUC students?", simple linear regression was employed, as shown in Table 5.

Table 5. The effect of self-control of academic self-handicapping

Dependent Variable	Model Summary		ANOVA			Coefficient				
	R	R2	F	df	Sign. F		b	Std. Error	Calcu-lated t	Sig. t
Academic Self-handicapping	0.598	0.358	71.228	1	0.000	Self-Control	-0.808	0.096	-8.440	0.000

Table 6 showed that there was a statistically significant effect for self-control on academic self-handicapping (R=0.598), which indicated that there was a statistically significant correlation between the independent variable (self-control) and the dependent variable (academic self-handicapping). R2 was (0.358) which indicated that self-control accounted for (35.8%) of the total variance in academic self-handicapping, while the residuals were explained by other variables that were not included in the statistical analysis. Also, it can be seen that the value of F was (71.228) at the confidence interval level (Sig = 0.000), which confirmed the regression significance at (α = 0.05). Coefficient table showed that (B) value for self-control was (-0.808, t = -8.440, Sig = 0.000), indicating that the effect of this domain was significant. This implies that the increase in self-control by one point increases academic self-handicapping by (-0.808).

4. Discussion

Regarding the result of the first question, the total means score of academic self-handicapping was (3.01), with moderate level. This can be attributed to the fact that university students face a lot of psychological and academic pressure due to the academic requirements during their studies. Additionally, the social spaces expand at the university level in terms of relationships and participation in sports and social activities, and this in turn reduces study opportunities and serious follow-up to the educational process. This makes students claim that there are obstacles that prevent their achievement of academic requirements and tasks. Thus, they resort to the use of academic self-handicapping in order to protect themselves. This finding is consistent with the result of Ghanem's (2017) study which indicated that there is a medium level of academic self-impediment among university students.

With regard to the result of the second question, this can be attributed to the fact that university students', despite possessing knowledge and self-awareness, exposure to many stressful and urgent situations, which are expected to have affected their ways of thinking, beliefs and psychological and social adaptation, lead them to lose the ability to control their behaviors, impulsiveness and thus committing many violations, whether on the academic or social level. This result agrees with Al-Rabee and Atyyeh's (2016) finding, which indicated that the level of self-control among their participants was average. It also agrees with the result of Zhu et al.'s (2016) study which indicated that the level of self-control among their participants was moderate.

As for the result of the third question, this might be attributed to the fact that university students (males and females) at IUC tend to live nearly the same life and academic experiences, which sometimes makes them unable to avoid claiming that there are some obstacles that prevent them from performing well in some educational situations for fear of failure. Thus, this pushes them to adopt some obstacles, to justify their failure in order to protect themselves from negative consequences. This result is consistent with Kalyon et al.'s (2016) finding which indicated the lack of differences in the level of academic self-disruption attributable to gender.

With regard to the level of self-control, the differences were in favor of females. This can be attributed to parental upbringing methods in the Jordanian society which are based on a culture in which a clear role for the females is defined, represented by providing them with all the skills and knowledge that help them to face situations and threats and not to rush behind temptations and stimuli that may push them to deviation. Thus, more controlling discipline and commitment can be witnessed here. These are mandatory cultural requirements to protect females which are considered integral part of social upbringing, although the university environment is rich in all pollutants due to media openness and the development of means of communication. This result is not consistent with Al-Rabee's (2016) study which indicated the presence of differences in the level of self-control because of the gender variable and in favor of male students.

Finally, the result of the fourth question can be attributed to the fact that self-control constitutes a standard and a social, cultural and moral requirement for every individual in order to achieve psychological and social adjustment. Nonetheless, some students fail to achieve a required level of self-control. Students with low levels of self-control at the university level suffer greatly from control of emotions, impulsivity, behavioral problems, poor perseverance, and low academic achievement (Vohs et al., 2014). This is expected to help students in their choice of academic self-handicapping behavior as a means of protection. Students protect themselves when their ability to perform academic tasks successfully is questionable, especially those new tasks, and thus they tend to create obstacles that negatively affect their performance.

5. Recommendations

The study recommends improving self-control especially among male students as it affects their low level of self-handicapping and improving the level of self-control of male students by developing training programs for this purpose.

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