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Self-Handicapping Among University Students: The Role of Procrastination, Test Anxiety, Self-Esteem, and Self-Compassion

Funda Barutçu Yıldırım
Center for Advancing Learning and Teaching, Middle East Technical University, Ankara, Turkey

Ayhan Demir
Faculty of Education, Department of Educational Sciences, Middle East Technical University, Ankara, Turkey

Abstract

The purpose of the present study was to examine the predictor role of procrastination, test anxiety, self-esteem, and self-compassion for the variation in university students' self-handicapping. The sample of the study consisted of 801 undergraduate students (404 females and 397 males). In order to collect data, Self-Handicapping Scale, Tuckman Procrastination Scale, Anxiety Subscale of Academic Emotions Questionnaire, Rosenberg Self-Esteem Scale, and Self-Compassion Scale were used. Stepwise regression analysis was conducted, and results showed that all of the predictor variables significantly contributed in explaining self-handicapping. The model explained the 59% of the variance in self-handicapping, whereas semi-partial variance of procrastination, test anxiety, self-esteem, and self-compassion were 17%, 4%, 2%, and 2%, respectively.

Keywords

Self-handicapping, procrastination, test anxiety, self-esteem, self-compassion

Corresponding Author:
Funda Barutçu Yıldırım, Center for Advancing Learning and Teaching, Middle East Technical University, 06800 Ankara, Turkey.
Email: fundabrt@gmail.com

Introduction

Self-handicapping is creating or claiming obstacles to successful performance in order to protect the sense of self-competence (Jones & Berglas, 1978). Self-handicapping behaviors decrease the probability of success; however, they enable individuals to cover up their failures by creating handy excuses instead of facing the real cause, which is the lack of ability (Brown, 1998). According to Elliot and Church (2003), specific failure is related with a given task, but global failure is related with intellect or personality. For self-handicappers, avoiding global failure is more important than avoiding specific failure. If a self-handicapper performs poorly in an evaluative situation, she/he can explain the poor performance by using the impediment rather than incompetence. If she/he performs successfully despite the impediment, her/his competence is enhanced (Warner & Moore, 2004). Hirt, McCrea, and Boris (2003) elucidated self-handicapping with an example. In their example, a student goes to a cinema the night before the exam rather than studying. If he does not do well in the exam, he can present the cause as lack of studying. In this way, he obscures the lack of ability or intelligence. If he performs well, he may infer that he is intelligent or has ability because he succeeds in the exam without studying.

In the short term, self-handicapping may have benefits. It helps to externalize failure by reducing the diagnosticity of the absence of the underlying ability (Brown, 1998). In a qualitative study conducted by Martin, Marsh, Williamson, and Debus (2003), some participants reported that presenting excuses for a failure (e.g., withdrawal of effort or procrastination) is easier than saying that I am not smart or good at it. It preserves positive self-evaluation (Hirt, McCrea, & Kimble, 2000) and makes people ready for others' evaluation in case of failure (Brown & Kimble, 2009) so people perform better because they focus on the task rather than evaluation concerns (Snyder & Higgins, 1988). Deppe and Harackiewicz (1996) suggest that people who self-handicapped might be less anxious and less concentrated on the fear of failure during the performance because they have already had an explanation for failure.

On the other hand, self-handicapping is costly in the long run. Zuckerman, Kieffer, and Knee (1998) revealed that self-handicapping is negatively associated with self-esteem and positively correlated with negative mood. High self-handicappers use more dysfunctional coping strategies such as denial, disengagement, and self-focused rumination that produce negative emotions. Over time, lower self-esteem and higher negative mood are associated with higher self-handicapping. Besides these, they found a negative correlation between self-handicapping and grade point average (GPA), the higher the self-handicapping score, the lower the GPA. This negative correlation is mediated by study habits. High self-handicappers reported that they spent less time for exam preparation and use less-efficient methods. Furthermore, self-handicapping and frequency of visiting university health service are positively associated. When

evaluating the relationship between self-handicapping and adjustment-related variables over time, it was found that self-handicapping yields poor adjustment and poor adjustment yields self-handicapping; therefore, this study provides evidence for a vicious cycle of self-handicapping. In addition, self-handicapping is positively associated with depression, anxiety, and stress level (Sahranç, 2011).

Furthermore, several other studies show negative association between self-handicapping and performance in school (Elliot & Church, 2003; McCrea & Hirt, 2001; Rhodewalt, 1990; Zuckerman et al., 1998). High self-handicappers reduce effort and express more stress before the exam, and their exam performance is worse than the low self-handicappers (McCrea & Hirt, 2001). They have more negative automatic thoughts and lower intrinsic motivation (Kapıkıran, 2012). In addition, they use more external locus of control and maladaptive perfectionism (Arazzini-Stewart & De George-Walker, 2014). Self-handicapping was found as a negative predictor of both exam performance and GPA (Elliot & Church, 2003). Additional mediation analysis yield that performance avoidance goal is a partial mediator of the relationship between self-handicapping and both exam performance and GPA (Elliot & Church, 2003). Self-handicappers reported low level of self-esteem, school adjustment and achievement, high level of norm-breaking behavior, and poor teacher relations (Määttä, Stattin, & Nurmi, 2002), and they are more prone to cheating (Özgüngör, 2008).

Moreover, self-handicapping may be disadvantageous for interpersonal relationships (Hirt et al., 2003). In the study conducted by Luginbuhl and Palmer (1991), participants evaluated people who self-handicapped and who did not in a given scenario in several dimensions. Self-handicapped people were evaluated as more intelligent, knowledgeable, and having higher grades. However, they were seen as less motivated and less desirable for being a study mate. In addition, using less persuasive self-handicapping strategies brings the risk of being ashamed and labeled as a fraud and using more persuasive self-handicapping strategies would decrease the actual performance (Shepperd & Arkin, 1989).

As it is apparent, self-handicapping, emerging as a big obstacle to realize one's potential and to succeed, has many negative associations with academic life, health, and psychological well-being. To examine the factors that may be associated with self-handicapping tendencies of people is important to prevent it and its heavy costs. With this perspective, in this study, the predictor role of procrastination, test anxiety, self-esteem, and self-compassion in self-handicapping were examined.

Procrastination, a tendency to put off or avoid starting and completing a task (Tuckman, 1991), is a common problem among university students (Kim & Seo, 2015; Uzun-Özer, Demir, & Ferrari, 2009), and the literature showed that there is a positive association between procrastination and self-handicapping. In a meta-analysis study, van Eerde (2003) examined correlates of procrastination and found that the highest positive correlation was between procrastination and self-handicapping. She inferred that this high correlation may stem from the fact that these constructs are overlapping. Ferrari (1991) found out that

procrastinators are more likely than non-procrastinators to choose distracting music while completing a cognitive intelligence task. His study showed that procrastinators have a higher proclivity to self-handicap when compared to non-procrastinators. Moreover, Beck, Koons, and Milgrim (2000) revealed that high self-handicappers procrastinated more by studying less and delaying the exam preparation than low self-handicapper did. Similarly, Ferrari and Tice (2000) found out that procrastinators were more prone to self-handicapping by spending less time for preparing a test and spending more time for fun and alternative tasks when the task was presented as important and evaluative of cognitive skills.

By postphoning a task, procrastinators detract negative evaluation from their inability to inadequate time (Ferrari, 1991). In other words, from the self-handicapping perspective, procrastinators create a time lag by delaying starting and/or completing a task and then they use the inadequacy of the time as an impediment, which obscure their inability, incompetency, or unintelligence. Although there are many other motives behind procrastination, one of the most well-known one is protecting self-esteem (Lay, Knish, & Zanatta, 1992), and this is also a common motive for self-handicapping.

In some studies, self-handicapping was considered as a predictor of procrastination (e.g., Strunck & Steele, 2011), but in others, predictor role of procrastination in explaining self-handicapping was examined (e.g., Akça, 2012). According to Beck et al. (2000), self-handicapping and procrastination are overlapping construct and high scores on one scale were predictive of high scores on the other. In this study, in line with our research question, we considered procrastination as a predictor of self-handicapping because procrastination is regarded as one of the self-handicapping strategies (Beck et al., 2000; Cheng & Law, 2015; Ferrari & Tice, 2000), and self-handicapping may occur with via many different ways (Midgley, Arunkumar, & Urdan, 1996). Hence, self-handicapping is complexer and broader concept than procrastination. For this reason, we consider self-handicapping as an outcome variable rather than predictor variable.

Similar to procrastination, some students may benefit from test anxiety by using it as a form of psychological self-protection (Thompson, 2013), although studies showed negative effects of test anxiety on students' health (e.g., Kavakcı, Güler, & Çetinkaya, 2011) and academic outcomes (e.g., Brooks, Alshafei, & Taylor, 2015). The relationship of test anxiety and self-handicapping have not explored deeply in the literature but in a recent study, Firoozi, Zadebagheri, Kazemi, and Karami (2016) found a positive association between test anxiety and self-handicapping. Moreover, the study conducted by Smith, Snyder, and Handelsman (1982) provided valuable information, and it revealed that when test anxiety is perceived as a convincing explanation, test anxious students use their anxiety symptoms to obscure the lack of intelligence. In other words, the cause of poor performance was presented as test anxiety symptoms rather than

their unintelligence. Hence, their self-concept is protected. Due to the fact that it does not require active creation of obstacles and the claim of having test anxiety provides an explanation for failure or poor performance, it is less costly (Hirt et al., 2000). In addition, it is more tolerable by the educators rather than other forms of self-handicapping such as withdrawal of effort (Hirt, Deppe, & Gordon, 1991).

Self-esteem is included in this study because although it is known that self-esteem is a significant contributor to the explanation of self-handicapping (Harris & Snyder, 1986), previous studies produced different results about how the level of self-handicapping is associated with the level of self-esteem. We want to reveal that how self-esteem is associated with self-handicapping in our sample. Anticipated threat to self-esteem may light the fuse of self-handicapping (Snyder & Smith, 1982; Tice, 1991). Some researchers found that people with high self-esteem self-handicapped more (e.g., Tice & Baumeister, 1990), while others revealed that people with low self-esteem are more prone to self-handicapping (Prapavessis & Grove, 1998). Martin and Brawley (2002) interpreted these inconsistent findings as that people with both high and low self-esteem use self-handicapping strategies with different purposes. The motive of people with low self-esteem is protecting their self-esteem and preventing to diminish its worth rather than boosting their success as people with high self-esteem do (Tice, 1991).

Self-compassion is taken as a possible predictor in this study to find out whether it contributes in explaining self-handicapping similar to self-esteem. Both self-esteem and self-compassion are ways of explaining the self, but Neff (2003) claimed that self-compassion is proposed as a healthier alternative approach to self (Neff, 2003) in which self-worth is not based on success and capabilities; failure, inadequacy, and incompetency are accepted with the awareness of imperfect human nature (Marshall et al., 2015). In addition, unlike self-esteem, self-compassion does not deal with ego threats because other people's evaluation or ideal standards were not taken into consideration for self-evaluation (Neff, Hsieh, & Dejitterat, 2005). Self-handicapping is triggered with a perceived threat to self-concept but self-compassion might stave this treat. Petersen (2014) found out that self-compassion explained 3% of the variance in self-handicapping as a negative predictor. Moreover, a recent study conducted by Akın and Akın (2015) examined the role of self-compassion in predicting self-handicapping with a Turkish university student sample. Their study result showed that 51% of the variance in self-handicapping was explained by self-compassion. Although the inverse association between self-compassion and self-handicapping theoretically fits well, it still needs further empirical support owing to the limited number of studies in which it was revealed that high self-compassionate people have lower tendency to self-handicap.

With the light of the literature, the purpose of this study is to examine the predictor role of procrastination, test anxiety, self-esteem, and self-compassion for the variation in university students' self-handicapping. Given this purpose, the answer of the following question was sought out. "How well do procrastination, test anxiety, self-esteem, and self-compassion predict the variation in university students' self-handicapping?"

Method

Participants

Turkish undergraduate students constituted the target population, whereas students of a large state university constituted the accessible population of the current study. The selected university locates in the capital city of Turkey and has students from all cities of Turkey representing the country. Eight hundred and one students from 38 different departments participated voluntarily in the study. Four hundred and four (50.4%) of the students were females, 397 (49.6%) of them were males. Three hundred and seventy-two (46.4%) of them were from Faculty of Engineering; 287 (35.8%) of them were from Faculty of Education; 78 (9.7%) of them were from Faculty of Economics and Administrative Sciences; 59 (7.4%) of them were from Faculty of Arts and Science; 4 (0.5%) of them were from Faculty of Architecture; and 1 (0.1%) of them did not specify their faculties. Two hundred and one (31.3%) of them were first-grade, 268 (33.5%) of them were second-grade, 135 (16.9%) of them were third-grade, 134 (16.7%) of them were fourth-grade, and 6 (0.7%) of them were fifth-grade students. Participants' cumulative GPA ranged from 0.33 to 4.00 with a mean of 2.75 ($SD = 0.62$).

Instruments

Self-Handicapping Scale (SHS), developed by Jones and Rhodewalt (1982), is a 25-item self-report measure. Items are rated on a six-point scale with anchor points labeled: disagree very much (0), disagree pretty much (1), disagree a little (2), agree a little (3), agree pretty much (4), and agree very much (5). SHS includes items such as "When something important is coming up, like an exam or a job interview, I try to get as much sleep as possible the night before" and "I sometimes enjoy being mildly ill for a day or two because it takes off the pressure." Rhodewalt (1990) found internal consistency reliability coefficient as .79 and the test–retest reliability coefficient as .74 for the scale. Akın (2012) adapted the scale into Turkish and found the internal consistency reliability coefficient of the scale as .90 and the test–retest reliability coefficient as .94. In the current study, reliability estimates for the scale was calculated by using Cronbach's alpha, and it was found as .74.

Tuckman Procrastination Scale (TPS) was developed by Tuckman (1991) to determine the procrastination tendency of college students. The single-factor instrument includes 16 items which are rated on a four-point scale ranging from strongly disagree (1) to strongly agree (4). TPS includes items such as "I postpone starting in on things I don't like to do"; "When I have a deadline, I wait till the last minute." In the original study, Tuckman (1991) found the Cronbach's alpha as .86. In a more recent study, it was found as .91 (Tuckman, 2007). Uzun-Özer, Saçkes, and Tuckman (2013) adapted the TPS into Turkish and found the Cronbach's alpha as .90. In this study, Cronbach's alpha was found as .93 as a reliability coefficient of the scale.

Academic Emotions Questionnaire (AEQ) was developed by Pekrun, Goetz, Titz, and Perry (2002). In this study, only anxiety subscale was used. The anxiety subscale of AEQ consists of eight items. Items (i.e. "I get so nervous I can't wait for the exam to be over." "My hands get shaky during the exam.") are rated on a five-point scale with anchor points labeled: almost never (1), rarely (2), sometimes (3), usually (4), and almost always (5). Cronbach's alpha reliability value of this subscale was found to be .92 (Pekrun et al., 2002). Anxiety dimension of AEQ was adapted to Turkish by Çapa Aydın and Emmioğlu (2008), and the reliability estimate was reported as .87 for anxiety dimension for the Turkish version. In this study, Cronbach's alpha was calculated as .85.

Rosenberg Self-Esteem Scale (RSES) was developed by Rosenberg (1965) to measure global self-esteem. It is a unidimensional, 10-item self-report measure. Items are rated on an agreement scale with four anchor points labeled: strongly disagree (1), disagree (2), agree (3), and strongly agree (4). Two sample items of RSES are "I feel that I am a person of worth, at least on an equal plane with others." "I certainly feel useless at times." Two-week test–retest reliability coefficients of the RSES were found as $r = .85$ and .88 (Rosenberg, 1979). Çuhadaroğlu (1985) adapted the scale into Turkish and found the correlation between psychiatric interview scores and RSES scores as .71. Cronbach's alpha was calculated as .89 for RSES in the current study.

The Self-Compassion Scale (SCS) was developed to measure self-compassion by Neff (2003). SCS is a 26-item self-report measure. Items (i.e. "When things are going badly for me, I see the difficulties as part of life that everyone goes through" and "When I'm going through a very hard time, I give myself the caring and tenderness I need") are rated on a five-point scale with anchor points labeled: almost never (1), occasionally (2), about half of the time (3), fairly often (4), and almost always (5). Neff (2003) reported Cronbach's alpha coefficient as .92 for the scale. SCS was adapted to Turkish by Deniz, Kesici, and Sümer (2008). In the Turkish version, items were loaded on a single factor. Since the two items, which have item total correlation less than .30 were removed, Turkish version includes 24 items. Internal consistency coefficient and the test–retest reliability coefficient of the scale were found as .89 and .83, respectively,

for the Turkish version (Deniz et al., 2008). Cronbach's alpha coefficient was calculated as .91 for the whole scale in the current study.

The outcome variable of the study was self-handicapping, and the predictor variables were procrastination, test anxiety, self-esteem, and self-compassion. The outcome variable was the mean total of scores as measured by the SHS. The predictor variables were the mean total of scores as measured by TPS, anxiety dimension of AEQ, RSES, and SCS, respectively.

Procedure

After taking the approval of the university ethics committee, the researcher took permission from the faculty members in order to collect data during class hours. Informed consents were distributed to participants who are voluntary. After gathering informed consents, data collection instruments were administered during regular class hours. The administration took about 10 to 15 minutes.

Data analysis

Prior to analyses of data, erroneous entries and missing values were checked, and data were cleaned. First, missing values were calculated and found lower than 5%. Missing value analysis was not performed because the small amount of missing values produce similar results (Tabachnick & Fidell, 2007). Second, assumptions for the multiple regression analysis as stated by Tabachnick and Fidell (2007) (sample size, normally distributed errors, homoscedasticity, independent errors, linearity, multicollinearity, and influential observations) were checked, and all the assumptions were met. Table 1 summarized the descriptive statistics and intercorrelation of major study variables by using Pearson correlation coefficient. All correlations were significant. The highest correlation coefficient ($r = .63$) was found between self-handicapping and procrastination; the lowest correlation coefficient ($r = .22$) was found between test anxiety and procrastination. Finally, stepwise regression analysis was conducted to evaluate how well procrastination, test anxiety, self-esteem, and self-compassion

Table 1. Summary of descriptive statistics and correlation matrix of the major study variables.

Variables	*M*	*SD*	1	2	3	4	5
Self-handicapping	2.19	0.5	1.00				
Procrastination	3.04	0.82	.63*	1.00			
Test anxiety	2.20	0.75	.49*	.22*	1.00		
Self-esteem	3.10	0.55	–.55*	–.36*	–.42*	1.00	
Self-compassion	3.12	0.55	–.55*	–.36*	–.42*	.62	1.00

*$p < .05$.

predicted the variation in university students' self-handicapping by using IBM SPSS 24.

Results

Initially, the descriptive statistics were checked. The mean score of self-handicapping was 2.19 with a standard deviation of 0.5. The mean score of the procrastination was 3.04 with a standard deviation of 0.82. The mean score of test anxiety was 2.20 with a standard deviation of 0.75. The mean score of self-esteem was 3.10 with a standard deviation of 0.55. The mean score of self-compassion was 3.12 with a standard deviation of 0.62.

Stepwise regression was conducted, and in the first step, procrastination, in the second step, test anxiety, in the third step, self-esteem, and in the last step, self-compassion, were added to the model. The last model was significant $F(4, 795) = 292.04$, $p < .05$, and results were summarized in Table 2.

As shown in Table 2, all of the predictor variables significantly contributed to self-handicapping. The last significant model explained the 59% of the variance in self-handicapping, whereas semi-partial variance of procrastination, test anxiety, self-esteem, and self-compassion were 17%, 4%, 2%, and 2%, respectively.

Discussion

This study aimed to examine how well procrastination, test anxiety, self-esteem, and self-compassion predict the variation in university students' self-handicapping. The results indicated that all of the predictor variables significantly contribute to explaining self-handicapping and procrastination is the most powerful predictor in this study. Self-handicapping increased with increased procrastination. The results of the current study were very similar to the findings of Akça's (2012) study. She tested predictor role of procrastination with two other different variables and

Table 2. Summary of stepwise regression analysis predicting self-handicapping.

	Model 1			Model 2			Model 3			Model 4		
Variable	*B*	*SE*	β	*B*	*SE*	β	*B*	*SE*	β	*B*	*SE*	β
Procrastination	0.39	0.02	.63*	0.34	0.02	.55*	0.29	0.02	.48*	0.28	0.02	.45*
Test anxiety				0.24	0.02	.37*	0.18	0.02	.27*	0.16	0.02	.24
Self-esteem							–0.25	0.02	–.27*	–0.17	0.03	–.18*
Self-compassion										–0.14	0.02	–.17*
AdjustedR^2		.40			.52			.58			.59	
ΔR^2		.40			.13			.05			.02	
F		523.46*			438.75*			363.50*			292.04*	

*$p < .05$.

found that procrastination was the most powerful predictor and accounted for 17% of the explained variance in self-handicapping. Moreover, the findings of the current study corroborate findings of the previous research which pointed out a positive association between procrastination and self-handicapping (Beck et al., 2000; Ferrari, 1991; Ferrari & Tice, 2000; Strunk & Steel, 2011; van Eerde, 2003) but the correlation between procrastination and self-handicapping is remarkably higher than previous studies. This high correlation might stem from two reasons. First, the sample size of the current study is substantially larger than the sample sizes of other studies, and larger sample size might linked to a stronger correlation coefficient. Second, self-handicapping and procrastination are overlapping constructs (van Eerde, 2003), and SHS used in this study includes items related with procrastination such as "I tend to put things off until the last moment."

Ferrari and Tice (2000) stated that procrastination can be regarded as behavioral self-handicapping strategy because procrastination is creation of time limit before a task that should be completed. Students who procrastinate create an impediment to their successful completion of the task. Studies that examined procrastination from the self-handicapping perspective revealed a similar conclusion that procrastination is used as a self-handicapping strategy and they are overlapping constructs to some extent (Beck et al., 2000; Ferrari, 1991; Lay et al., 1992). Although procrastination provides an example for created impediments for self-handicapping, self-handicapping is more comprehensive because it includes many other created or claimed barriers such as making different kinds of performance-debilitating choices (Berglas & Jones, 1978; Brown & Kimble, 2009; Higgins & Harris, 1988; Jones & Berglas, 1978; Rhodewalt, Morf, Hazlett, & Fairfield, 1991; Tice, 1991; Tucker, Vuchinich, & Sobell 1981; Zuckerman & Tsai, 2005), setting unreachable performance goals (Greenberg, 1985), reporting anxiety, unfavorable conditions, hypochondriasis, etc. (Greenberg, Pyszczynski, & Paisley, 1984; Rhodewalt, Saltzman, & Wittmer, 1984).

The positive association between these two constructs is explained by common reasons and motives behind them. Students may procrastinate in order to deal with fear of failure, concerns about not fulfilling others' and own expectations, and lack of self-confidence (Brownlow & Reasinger, 2000). In addition, a real or anticipated threat to self-esteem is another reason for procrastination (Lay et al., 1992). People are also motivated to engage in self-handicapping in the presence of anticipated evaluative threat that brings the risk of a decrease in self-esteem (Hirt et al., 1991; Martin et al., 2003). All of these reasons can be combined under the heading of protection and enhancement of self-worth, which is the primary motive of self-handicapping.

Similar to procrastination, test anxiety was found as a significant positive predictor. Self-handicapping increases with increased test anxiety. The finding of this study is supported by other studies that showed the direct relationship between self-handicapping and test anxiety (Lay et al., 1992; Thomas &

Gadbois, 2007). The usage of test anxiety as a self-handicapping strategy is tested by Smith et al. (1982), and they found that when test anxiety is perceived as an acceptable explanation, students use its self-protective function for making an alternative explanation for their failure. Test anxiety is regarded as a kind of self-reported handicapping which is based on claims rather than an active creation of the impediment. When students fail, she/he can explain the reason for her/his poor performance to be test anxiety rather than lack of intellect, ability, or competence.

The common characteristics and goals that are shared by both test-anxious students and self-handicappers clarify the positive relationship between them. First, test anxious students think about the possibility of poor performance and its negative implication and they compare themselves to others (Sarason & Sarason, 1990). Similarly, people are more inclined to self-handicapping, when there is a private expectation of failure but public expectation of success (Berglas & Jones, 1978). Second, test anxious students experience internal distractions and have self-doubt in evaluative situation (Sarason, 1984). In a similar vein, one of the antecedents of self-handicapping is uncertainty about capabilities (Harris & Snyder, 1986; Warner & Moore, 2004). People who are certain about their self-concept do not need attributional benefit of self-handicapping (Berglas & Jones, 1978). Moreover, test anxious students have more negative and irrational thoughts (Wong, 2008), and these thoughts may foster their evaluation anxiety and lead them to anticipate a bigger threat to their self-concept which is one of the primary reasons behind self-handicapping. All of the aforementioned similarities between test-anxious students and self-handicappers may result in a positive association between them.

Self-esteem was found as a significant negative predictor, and this finding showed that self-handicapping increases with decreasing self-esteem level. Although some study findings revealed that people with high self-esteem self-handicapped more (e.g., Tice & Baumeister, 1990), several studies support the finding of this study which is that people with low self-esteem have a higher tendency to self-handicap (e.g., Feick & Rhodewalt, 1997; Prapavessis & Grove, 1998; Rhodewalt, 1990, Warner & Moore, 2004).

Several reasons might induce the negative association between self-handicapping and self-esteem. To begin with, it can be best understood with the self-esteem protection motive of both self-handicapper and people with low esteem. People with high self-esteem may interchangeably use their positive assets when their self-worth is exposed to a threat. Yet, people with low self-esteem do not have rich repertories of positive views regarding their self-concept; hence, the limited resources make them more fragile and more defensive when they face a possible threat to their self-worth (Spencer, Josephs, & Steele, 1993). They detest facing situations that diminish their self-esteem, which has been already low (Baumeister, 1993).

People with low self-esteem suffer more and pay higher costs in failure situations; therefore, their primary concern is protecting themselves from the negative consequences of failure (Tice, 1993). Their tendencies to use self-protection strategies increase; thus, they may possibly use more self-handicapping by providing external causes to cover up for the shortage of their own resources and fragility. Moreover, self-esteem has an anxiety buffering function (Greenberg et al., 1992). When there is an anticipated threat, anxiety increases; people with high self-esteem deal with anxiety more successfully. People with low self-esteem may incline to use strategies that protect and fix their self-esteem (i.e., self-handicapping) due to inability to decrease their anxiety.

The higher tendency of low self-esteemed students to engage in self-handicapping strategies may also be explained with uncertainty about their competences and abilities. People, who believe that they are capable of overcoming difficulties and reaching attained goals, do not engage in self-handicapping strategies; however, people who do not have enough confidence to handle compelling conditions or to complete a performance with success need more attributional advantage of self-handicapping (Berglas & Jones, 1978; Warner & Moore, 2004). People with low self-esteem have less self-knowledge, experience more self-concept confusion, and their self-knowledge is more fluctuating, uncertain, and unstable when compared to people with high self-esteem (Baumeister, 1993; Campbell & Lavallee, 1993). Therefore, people with low self-esteem have a higher inclination to self-handicapping in order to provide a ready explanation for failure possibility of which is increased with uncertain abilities.

Self-compassion, which is a relatively less investigated predictor, is also found to be a significant negative predictor. Self-handicapping decreases with increased self-compassion. This finding is parallel with the studies that disclose the negative predictor role of self-compassion in explaining self-handicapping (Akın & Akın, 2015; Petersen, 2014). The association between self-handicapping and self-compassion may be understood by examining the different approaches to evaluation and implication of possible failures. According to self-handicapping perspective, people perceive an anticipated threat to their self-concept when they face a task that has a diagnostic value about their competence, ability, or intelligence (Rhodewalt et al., 1991; Snyder & Smith, 1982), and they fear from failure. In addition, they have self-presentational concerns; they give importance to what others think about them (Rhodewalt et al., 1991). Due to the fact that they need to be viewed positively by themselves, they want to polish their self-worth or at least preserve it (Blaine & Crocker, 1993). In this regard, self-enhancement and self-protection motives were triggered in evaluative situations (Rhodewalt et al., 1991). Rather than accepting the actual reasons for failure, which might be lack of competence, ability, or intelligence, they create or claim obstacles to

their performance for attributing the reasons for their poor performance to these obstacles (Berglas, & Jones, 1978).

According to self-compassion perspective, others' performance evaluation or ideal standards are not taken for granted; self-evaluation is made by accepting both good and bad characteristics, and possible or real failures are handled in a more balanced manner with the awareness of imperfect human nature. Self-compassionate people have higher perceived competence and less fear of failure (Neff et al., 2005). In other words, self-compassionate people do not have high self-presentational concerns or evaluation anxiety and they are less in need of self-protection or self-enhancement. Due to the fact that they do not need self-serving bias, they may be more capable of dealing with accurate knowledge about themselves. In this regard, they may be less in need of the attributional benefit of self-handicapping.

When the prediction degrees of the study variables were considered, it was expected to find out that the procrastination was the most powerful predictor because it is commonly used as a self-handicapping strategy and shares much in common with self-handicapping in terms of reasons and motives. Test anxiety was the second powerful predictor in this study. Similar to procrastination, students can use test anxiety as an explanation for their failure but this strategy is not frequently used as much as procrastination. The lowest prediction degree was shared by self-esteem and self-compassion. They had the same prediction degree probably because they are alternative ways of expressing self, and self-handicapping is triggered in case of an anticipated threat to self-concept.

The findings of the present study have implications for students, counselors, educators, and psychologists working at universities and secondary schools in that they might be used to understand the barriers that were created or claimed by the students. Some students are aware of their tendency to generate excuses for their failure, and some of them are not. This study provides information for both groups of students. They may gain awareness of their tendency to create or claim obstacles. In addition, they also facilitate how other important factors such as procrastination, test anxiety, self-esteem, and self-compassion affect students' self-handicapping tendencies. Moreover, people use self-handicapping strategies for its short-term benefits, but it has detrimental effects on their well-being and academic outcomes (Zuckerman & Tsai, 2005). This study provides information about its correlates, which may be beneficial in preventing this behavior and its detrimental effects. This study also revealed that self-esteem and self-compassion are significant contributors to self-handicapping. While dealing with self-handicapping, professionals should consider students' self-esteem and self-compassion level. Helping students to increase their self-esteem and self-compassion might be beneficial in decreasing their self-handicapping tendencies by improving their positive assets that they can be alternatively used in the case of a threat to their self-concepts. In addition, test anxiety and procrastination are prevalent problems among university students. Different approaches were

used while helping students with these problems. Using self-handicapping, perspective might be beneficial to professionals while studying students who have these problems and a high self-handicapping tendency.

As for the limitation in this study, data were collected at one point in time. In certain times, such as just before the exams, students may have higher inclination to self-handicapping, procrastination, and test anxiety. Therefore, the data collection time might have affected the students' responses. In this regard, longitudinal studies may reveal more comprehensive information related to the motivation of students. One suggestion for further research can be replication of this study with different university student samples by using random sampling, in order to increase the generalizability of the results. Second, certain types of behaviors (withdrawal of effort, using alcohol, procrastination, etc.) and claims (reporting test anxiety, physical symptoms, and etc.) were examined as kinds of self-handicapping strategies repeatedly; however, students have a larger repertoire of other kinds of self-handicapping. A survey study can be conducted to discover new types of self-handicapping strategies commonly used by students.

Overall, self-handicapping has not been adequately enquired in the literature yet. It has been remained as an incomplete puzzle. In order to complete this puzzle, it seems necessary to investigate the self-handicapping of students in different educational levels with both empirical and field studies.

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ORCID iD

Funda Barutçu Yıldırım http://orcid.org/0000-0003-3630-1019

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Author Biographies

Funda Barutçu Yıldırım is a research assistant in the Center for Advancing Learning and Teaching at Middle East Technical University. Her research interests include college experience, success barriers of university students, and close relationships.

Ayhan Demir is a professor in Educational Science Department at Middle East Technical University. His research interests include loneliness, social skills, conflict resolution, assertiveness, and procrastination.