



An Experimental Study on Academic Procrastination: Effects of Weekly Homework

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Abstract

The present study aimed at comparing the students' procrastination and self-regulatory scores after obtaining some strategies possibly improve the self-regulatory behaviours. The strategies included weekly course assignments, reflector writings and presentations on various topics. The subjects were 141 students enrolled in Educational Sciences department in a public university in Turkey during the second term of the 2012 -2013 academic year. Results of the analyses showed that the strategies used did not influence on students' procrastination but self-regulatory behaviours.

Key words: Academic procrastination, self-regulation

Introduction

One hundred and twenty years ago, William James recognized the psychological cost of procrastination (Klassen, et al., 2008). Since then, contemporary psychologists have increasingly been tracing procrastination (Steel, 2007) by conducting various research studies. Nevertheless, there is "much has yet to be learned about the causes of procrastination" (Steel, 2007, p.65). Even though procrastination has been increasing especially among university students, the empirical and theoretical foundations of procrastination research are less well established than those of other construct (Klassen et al., 2008). Therefore, procrastination remains "one of the least understood human miseries" (Ferrari, 1994, p. 673).

Procrastination is one of the common barriers increasing in the academic domain. A substantial body of literature demonstrates that it is prevalent at high levels in academic setting (Harriot & Ferrari, 1996), with some estimates as high as 95% (Ellis & Knaus, 1977; Steel, 2007). Although there is not published comparison study on the prevalence of procrastination across countries yet (Uzun Ozer, et al., under review), studies have shown that all the students from various countries and cultures report to engage in procrastination in various degrees (McCown & Roberts, 1994; Solomon & Rothblum, 1984; Uzun Ozer, Demir, Ferrari, 2009).

Most of the existing literature has concentrated on the negative side of procrastination in academic setting, suggesting that it has an injurious effect on performance such as poor grades and course withdrawal (Keller, 1968; Semb et al., 1979; Tan et al., 2008). Ferrari and Tice (2000), for instance, have depicted on procrastination as a form of self-handicapping or it might be engaged in to protect the threatened self-esteem (Ferrari, 1991). Hence, particularly the university population frequently seeks help from counselors and they complain about how badly this habit makes them feel (Schowuenburg, Lay, Pychyl, & Ferrari, 2004) and might bring lower level of life satisfaction. Sigall, Kruglanski, and Fyock, (2000) suggested procrastinators to be optimistic wishful thinkers. In this regard, students delay boring tasks due to their preference of another activity such as socializing with friends. When procrastinating, they don't report unhappy feelings because they would be engaged in relatively enjoyable and pleasant activities (König & Kleninmann, 2004; Pychyl et al., 2000). In this instance, procrastination can be seen as a self-regulation problem (Ferrari, 2001). Accordingly, numerous studies have shown in procrastinators to have self-regulation failure, compared to non-procrastinators (e.g., Blunt & Pychyl, 2005; Uzun Ozer, et al, 2014).

Wadkins (1999) believe that procrastination problem must be overcome if one expects to achieve any level of success. In this line, investigating the causes and consequences of procrastination has attracted the interest of many researchers, which led to the development of several models to understand the nature and at least reduce the level of procrastination (Dietz, Hofer, & Fries, 2007; Eun Hee, 2009; Seo, 2008). Some of the findings reviewed

procrastination related to self-regulation might be decreased when students were asked to perform regular specific tasks by deadline. In this way, in a number of studies the date of submitted term paper (Tice & Baumeister, 1997), the date of the questionnaire returned to the experimenter (Lay, 1986) the timing of quiz completion (Moon & Illingworth, 2005) or the timing of laboratory task initiation and completion (Senecal et al., 1997) have recorded to help procrastinators reduce putting the tasks off. In their group counselling study, Uzun, Demir, & Ferrari (2013) applied homework assignments and taking diary of procrastination strategies based on Ellis's (Ellis & Knaus, 1977) rational emotive behavioural approach. Consequently, researchers (Ferrari & Tice, 2000; Van Eerde, 2003; Wolters, 2003) argued that self-regulation is one of the strongest behavioral predictor of procrastination. In this respect, students' self-regulation and self-control tendencies became important variables to assess behavioral procrastination (Ariely & Wertenbroch, 2002; Howell et al., 2006; Klassen, Krawchuk, & Rajani, 2008). In this respect, we aimed to control procrastination in academic setting experimentally. Through the present study we investigated the effectiveness of the method used during the academic semester in reducing academic procrastination. We expected developing self-regulatory behaviour might help to decrease students' procrastination levels.

Method

Study Group

A total of 114 first year undergraduate students (67 female and 47 male) participated in the study. The average age of the participants was 19.63 ($SD = 1.1$) ranging from 17 to 22. The students participated in the study in the beginning and the end of the spring semester. In order to ensure the pre-test post-test design, a matched sample was utilized. In this respect, some of the cases in the pre-test were eliminated from the analysis since they didn't participate in the post-test.

Data Collection Instruments

The Turkish versions of Tuckman Procrastination Scale and Self Control Schedule were utilized to collect data.

Tuckman procrastination scale (TPS; Tuckman, 1991) assesses college students' procrastination tendencies. TPS consists of unidimensional 16 items on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). It is reliable ($\alpha = .89$; Tuckman, 2007) and valid ($r = -.47$ with General Self-Efficacy Scale; $r = -.54$; Tuckman, 1991 with behavioral measure of homework completion) scale. In the Turkish adaptation study Uzun Özer, Sackes, and Tuckman, (2014) found the scale reliable and valid ($\alpha = .90$; $r = .22$ with self-efficacy and $r = .23$ with self-esteem).

Self Control Schedule (SCS; Rosenbaum, 1980) was used assess students' tendencies to exert self-control methods to resolve behavioral problems. The scale consists of 36 items on a 6-point scale (-3 very uncharacteristic of me; +3 very characteristic of me). In the Rosenbaum's study, an alpha coefficient was computed on six different samples ranged from .78 to .86, indicating a high internal consistency among items. The SCS's evidence for validity was provided by correlations with Croskey's Measure of Communication Apprehension ($r = -.37$; Rosenbaum, 1980). The Turkish adaptation study Siva (1991) found Cronbach alpha reliability to be .79 and validity coefficient to be -.29 between the SCS and Rotter's Locus of Control Scale.

Design and Procedure

The design of the study was a pre-test post-test experimental design. After obtaining permission from the Human Ethical Committee, first grade of psychological counseling students were invited to take part in an experimental study. The aim of the research was briefly explain to students to prevent object bias treat of the validity. In the first week of the semester students were administered to the scales by the second author. During the semester, the students were given to deadline for completing various tasks including course assignments, reflections and presentations. They were informed about the low grades scoring for each day of procrastination. All the students participated in the study by completing tasks on time had ten course assignments. Six of the students pulled out from the study since they did not completed the work.

Results

A series of the t-test analyses were performed to compare the pre-test and post-test scores of the students' academic procrastination and self-regulation scores. Within the condition of the study, the results of the t-test yielded statistical significance on self-regulation scores beyond the .05 levels. The t-test analysis yielded that there was no significant difference on the students' pre-test and post-test scores on academic procrastination. However, results demonstrated a significant difference on students' self-regulation scores ($F_{1,121} = 4.32, p < .05$), suggesting that pre-test scores ($M = 116.9; SD = 15.2$) were higher than post-test scores ($M = 118.2; SD = 20.9$).

Discussion

The present study aimed at comparing the students' procrastination and self-regulatory scores after obtaining some strategies possibly improve the self-regulatory behaviours. The strategies included weekly course assignments, reflector writings and presentations on various topics. Results of the analyses showed that the strategies used did not influence on students' procrastination but self-regulatory behaviours.

In line with previous studies (Dewitte & Schouwenburg, 2002), students who had problems in regulating their behaviour reported a higher level of procrastination. In the academic arena, self-regulation involves being able to persistently pursue one's long-term study goals in spite of the presence of temptations (e.g., desire for social activities). Schonwenburg (2004) argued that working to achieve one's study goals in an environment with competing temptation does not only require willpower, but also regulation of numerous study-related processes such as the ability to concentrate and persist at the task. In this respect, overall the results of the study concluded that the method used is effective for self-regulation instead of directly reducing procrastination levels. The findings confirmed the literature that procrastination is a personality characteristic. The procrastination habit can be effectively decreased by using self-regulatory programs.

A list of recommendations might be given focusing on extending the generalizability of this study, improving the effectiveness of the procedure and the method used. The present study explored the effect of a method used during the semester for improving self-regulation and decreasing procrastination in a group sample of university students enrolled in department of educational sciences at a major state funded university. Therefore, the present study has the potential to generate preliminary information for understanding the student procrastination. Hence the results of the present study may provide valuable cues for both university counselors and researcher to develop programs through self-regulation that may reduce the negative effects of procrastination. On the other hand, there are some limitations should be

highlighted regarding the sample and the method utilized for the study. Convenient sampling should be the first limitation for the present study. Random sampling method used for the further studies with more demographically diverse population would no doubt to strengthen the findings of the study. The second and the most important limitation is the lack of control group and follow-up testing for the present study. Therefore, it would strongly recommend for the further studies to compare the result with the sample in the control group and third testing after weeks later for the follow up.

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