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Relationship between Procrastination and a University Subject in Polish University Students

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Abstract

The present research relates to relationships between procrastination and a university subject. It included 84 students of pre-school and early school pedagogy, psychology and economics as well as an additional group of extramural students of management being in employment. They were asked to fill up the Pure Procrastination Scale Questionnaire. Findings indicate that a tendency to procrastinate is highest in students of pre-school and early school pedagogy, and psychology. Moreover, the tendency to procrastinate was most clearly manifested in the behavioral domain, which suggests lack of self-efficacy and/or poor time management. The results obtained proved to be statistically significant, yet they should be treated with caution due to a small sample of the examined subjects. They, however, point to the direction of further research.

Keywords: *procrastination, university subjects, gender*

Introduction

A “typical procrastinator” is often defined as a young college student who intentionally defers starting and completing a task for no rational reasons, which often results in a feeling of shame and anxiety (Ferrari, 2010; Ferrari, Johnson and McCown, 1995; Tibbett and Ferrari, 2015), mood lowering and reduced performance levels (Tice and Baumeister, 1997) as well as appearance of somatic disorders (Klingsieck, 2013; Sirois, Melia-Gordon and Pynchyl, 2003). Some authors

believe procrastination to be a mark of a student's lifestyle despite being felt as non-beneficial (Park and Sperling, 2012; van Eerde, 2003). The action may be also delayed due to poor time management, especially a tendency to put off difficult tasks till the last minute, and a preference to concentrate on more interesting actions deferring those that are felt to be dull and adverse, even if those tasks are really important and urgent (Dietz, Hofer and Fries, 2007; Onwuegbuzie, 2004; Rabin, Fogel and Nutter-Upham, 2011; Richardson, Abraham and Bond, 2012). Moreover, a tendency to procrastinate is often referred to as a feeling of boredom and frustration (Blunt and Pychyl, 2000), lack of motivation (Vansteenkiste, Siereens, Soenens, Luyckx and Lens, 2009) as well as disorders of the self-regulatory system resulting in an inability to put plans into action (Beck, Koons and Milgrim, 2000; Lay, Knish and Zanna, 1992; Zimmerman, 2000). These factors seem to be closely connected with personality traits (Kim, Fernandez and Terrier, 2017), especially low conscientiousness (Locke and Latham, 1990, 2004), openness to experience (Schouwenburg and Lay, 1995; Watson, 2001) and extraversion (Kim, Fernandez and Terrier, 2017).

In addition, the interface between procrastination and neuroticism has been noted in many studies in connection with irrational thinking and perfectionism (Beck et al., 2000; Burka and Yuen, 1983/2008; McCown, Johnson and Petzel, 1989; Schlenker and Weigold, 1990). At the same time, Tibbett and Ferrari (2015) suggest that general procrastination is related to indecisiveness and a tendency to introversion, with the decisional procrastination to negative past experiences.

Other studies concentrate on social and demographic correlates of procrastination, revealing relationships between procrastination, age, marital status, family size, education, kind of work, job position, nationality, and gender (cf. Steel and Ferrari, 2013). Findings of those studies suggest that a tendency to procrastinate is more often observed in young men than in young women, in singles, and in office workers. Some differences between the age of male and female procrastinators were also observed. McCown and Roberts (1994) report that at the age under 20, a higher percentage of procrastinating men than women was noted, and over that age the ratio was equal to rise in men who were over 60. On the other hand, the first threshold of procrastination in women was found to be connected with early adolescence, and then to occur only between the age range of 55–60. It is probable, however, that the described tendencies need not be connected with the developmental factors but they might result from differences in measurement of a particular age group (Harriot and Ferrari, 1996).

Steel and Ferrari (2013) suggest that a tendency to procrastination is more frequently observed in citizens of such countries as Russia or Spain, in which there was not tradition to require self-discipline in contrast to the citizens of the USA, Japan, and Great Britain, who are taught to focus on work from their early days (cf. also Beutel et al., 2016).

Research Problem

A recent rise in the percentage of people who admit to procrastination creates a need for further research on procrastination aimed at gaining a better understanding of its causes and predictors. It is worth reminding that in the 1970s it was estimated to be not higher than 40%, to rise these days to 75–90% (Hill, Hill, Chabot and Barrall, 1978; Rosati, 1975; Ferrari et al., 2007; Steel, 2007; Steel and Ferrari, 2013). Academic procrastination may result in gaining lower college grade point average and in failure to finish dissertations (Muszynsky and Acamatsu, 1991; Wesley, 1994). It points to the necessity to further investigate the factors relating to procrastination and academic procrastination in particular. Despite a number of studies, such an important factor as the field of study, which might have a significant impact on a tendency to defer tasks, is not taken into account. Another important factor might be gender. Therefore, two hypotheses were formulated:

1. There is a statistically significant difference between a tendency to procrastinate and the field of study across the examined groups.
2. There is a statistically significant difference between a tendency to procrastinate and gender across the examined groups.

Research Methodology

Setting and participants

The study included 84 participants (32.1% men, and 67.9% women) at the age of 19 to 43 ($M=22.14$, $SD=4.64$). They were divided into four groups according to the field of study: pre-school and early school pedagogy, economics, psychology, and management. The participants of the first three groups were full-time students, while the fourth group comprised extramural management students with various employment status. Details of the demographic data of the participants are presented in Table 1.

Table 1. Demographic data of the examined groups

Field of study	Participants		Gender				Age	
			Woman		Man			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>M</i>	<i>SD</i>
Pre-school and early school Pedagogy	15	17.9	15	100	0	0	20.47	.834
Psychology	27	32.1	25	92.6	2	7.4	20.30	1.031
Economics	20	23.8	10	50	10	50	20.25	.967
Management	22	26.2	7	31.8	15	68.2	27.27	6.727

Instrument and Procedures

The informed consent of all the participants was obtained, and they were asked to give data on their age, gender, and field of study. Afterwards, they were asked to fill up the Pure Procrastination Scale Questionnaire (Steel, 2010; in Polish adaptation by Ciecuch and Stępień, with alternations introduced by Stępień and Topolewska, 2014, pp. 152–154), which makes it possible to discriminate three aspects of general procrastination: decisional, behavioral, and non-adaptive. The maximum score that can be obtained in the test are 60 points. The reliability of the entire scale was calculated with the use of Cronbach's *alfa*. The reliability coefficients for the scales were the following: general procrastination $\alpha=.89$, decisional aspect $\alpha=.87$, behavioral aspect $\alpha=.82$, and non-adaptive aspect $\alpha=.83$ (Stępień and Topolewska, 2014).

Research Results

Levene's test confirmed equality of variances for the field of study in all aspects of procrastination and for gender in decisional and non-adaptive procrastination (Table 2). The χ^2 test showed that there were no significant differences among the examined groups in the case of the field of study ($\chi^2(3) = 3.524; p = .318$), which justifies carrying out analysis of variance. Yet, significant differences were found for gender ($\chi^2(1) = 10.714; p = .001$). Therefore, non-parametric tests were used in analyses related to this variable.

The ANOVA analysis of variance indicated a possibility of significant differences in the tendency to procrastinate in the domain of general ($F(3,80) = 2.94, p = .038$) and behavioral procrastination ($F(3,80) = 4.579, p = .005$) in respect to the field of study, which was further confirmed by the analysis of contrasts ($t_{Gen}(80) = -2.785$,

Table 2. Results of Levene's Test

	Field of study		Gender	
	<i>F</i> (3,80)	<i>p</i>	<i>F</i> (1,82)	<i>p</i>
PRO_Gen	2.295	.084	3.953	.05
PRO_Dec	1.437	.238	2.433	.123
PRO_Beh	1.636	.188	5.052	.027
PRO_N/ad	.306	.821	.865	.355

$p = .007$, $t_{Beh}(80) = -3.608$, $p = .001$). The highest general procrastination was stated in the students of pre-school and early school pedagogy ($M = 37.27$, $SD = 10.92$), the lowest in the management students ($M = 28.59$, $SD = 8.75$). Post hoc comparisons with the use of the Scheffe test confirmed significance of the differences (8.67, $p = .052$) between those two groups.

On the other hand, differences between the means of the students of pedagogy and psychology ($M = 34.04$, $SD = 10.28$) as well as economics ($M = 33.55$, $SD = 5.83$) did not reach statistical significance as verified with the Scheffe test ($M_{ped-psych} = 3.23$, $p = .752$; $M_{ped-econ} = 3.72$, $p = .702$). Moreover, no significant differences were found between the means of the psychology and management students ($M_{man-psych} = -5.45$, $p = .238$) as well as between the management and economics students ($M_{man-econ} = -4.96$, $p = .384$). Hence, within the domain of general procrastination, a significant difference occurred only between the examined students of pedagogy and the students of management. Those findings are presented in Figure 1.

An evaluation of behavioral procrastination revealed a slightly different picture. In this case, significant differences (4.85, $p = .043$) between the means of the psychology students ($M = 20.67$, $SD = 6.26$) and management students were observed. Yet, the highest tendency to procrastinate was manifested by the students of pedagogy ($M = 22.27$, $SD = 5.56$) and the lowest the students of management ($M = 15.82$, $SD = 2.87$). Post hoc comparisons with the use of the Scheffe test confirmed the significance of those differences (6.45, $p = .015$).

The above-presented data show that the field of study does not have a direct impact on the tendency to procrastinate since the first hypothesis was only partially confirmed. Accordingly, no significant differences across all the examined groups were found in the case of decisional as well as non-adaptive types of procrastination. There were, however, significant differences between the students of pedagogy and management students in the general domain of procrastination

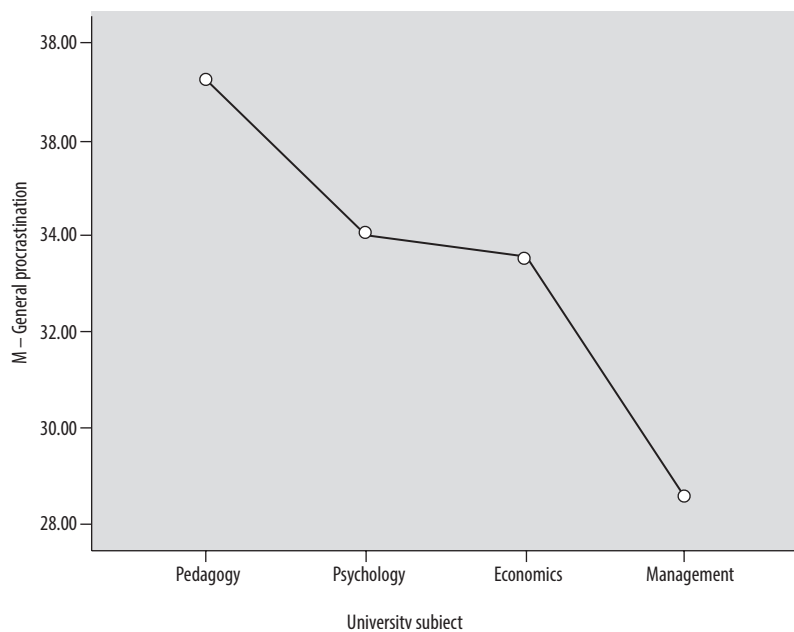


Figure 1. General procrastination and the field of study

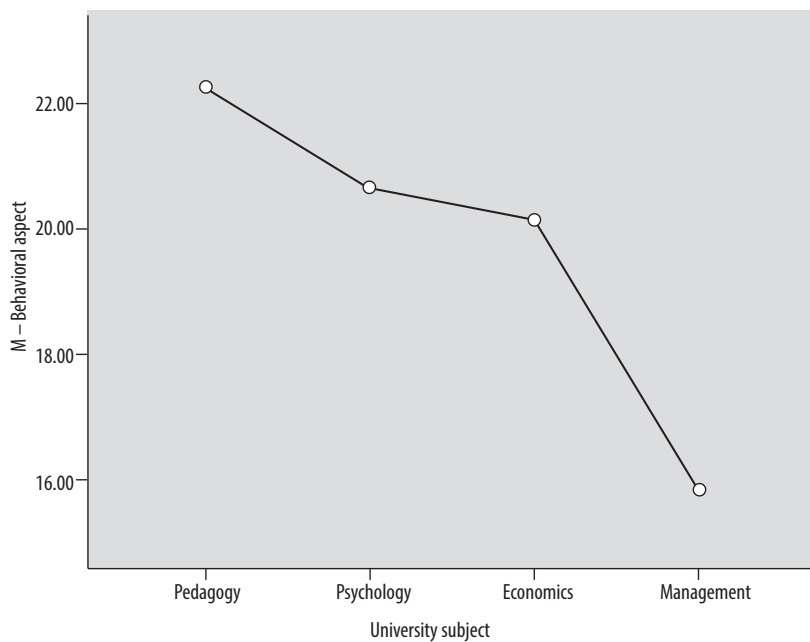


Figure 2. Behavioral procrastination and the field of study

as well as between the psychology and management students in its behavioral domain.

At the same time, we did not find any statistically significant differences between the examined women and men concerning all the types of procrastination under study ($U_{\text{gen}} = 702.5$; $U_{\text{dec}} = 754.0$; $U_{\text{beh}} = 618.0$; $U_{\text{n_ad}} = 627.5$; $p > .05$). It means that the second hypothesis was not confirmed, which allows for the conclusion that both men and women of that age manifest the same tendency to procrastinate.

Conclusions and discussion

The findings of the present study revealed that the tendency to procrastinate was most clearly manifested in the behavioral domain in the examined students of pedagogy, psychology, and economics, whereas it was lowest in the management students. It might be of concern to educators since the behavioral aspects of procrastination are believed to be connected with lowered self-confidence, lack of self-discipline and inability to organize one's everyday life, high anxiety, depression and neurosis (Beswick, Rothblum and Mann, 1988; Effert and Ferrari, 1989; Ferrari, 1989; Lay, 1986; 1987), as well as result from a fear of losing self-esteem (Burka and Yuen, 1983/2008; Ferrari, 1991; 1992). By delaying completing a task procrastinators avoid judgement regarding their own competences, which helps them to maintain the illusion of high dexterity (Baumeister, 1984; Baumaister and Scher, 1988). Some authors believe that procrastination may stem from wrong estimation of time required to complete tasks (Ferrari, 1991; Lay, 1988).

On the other hand, Schraw, Wadkins and Olafson (2007) point out that the tendency to procrastinate can be observed also in students with high academic achievement. They suggest that those students procrastinate in order to maintain a balance between their academic and social activities. At the same time, Ferrari (1991) observed the tendency to increase procrastination during the course of their academic carrier. It might be due to the fact that they coordinate their study plans with classmates as they find working in group more stimulating (Skowronski and Mirowska, 2013).

The above-mentioned observations may explain the differences found among the groups examined in the presented study. The students of pedagogy, psychology, and economics were full-time students, while the management group consisted of extramural working students. Moreover, they were older than the participants in the three previous groups. The young full-time students find it easier to socialize

and to spend leisure time in good company. They also do not need to combine study with work and family obligations.

Practical implications and future research

Bearing in mind the small sample of the examined students, the findings of the presented study should be treated as a matter of conjecture. Yet, they point to some important issues. First of all, they confirm the need for further study on relations between procrastination and student age and gender, as well as the perception of the field of study complexity. Other important factors worth further research are personality traits, demographic variables (e.g., citizenship), self-control, and type of university. In another study, Markiewicz found significant correlations between procrastination and neuroticism (2017), whereas the interface with other personality features measured with a Polish version of the NEO-FFI test was less pronounced. It seems that they should be treated as mediators and not predictors of procrastination. The same is true of other factors under study, which might explain the lack of consistence of the results obtained by various authors.

Statements

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