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# Associations between academic performance, academic attitudes, and procrastination in a sample of undergraduate students attending different educational forms

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**Abstract**

This study focuses on differences between attitudes toward school, procrastination and academic performance among traditional and distance learning university students. The study sample consists of 162 participants, students of the Babes Bolyai University, Faculty of Psychology and Educational Sciences. The participants were asked to provide demographical data and completed two questionnaires (Attitude Towards School Scale, Scale of Active and Passive Procrastination). Results suggest that there are weak to medium associations between some aspects of procrastination and the academic attitudes of students. The students from both types of educational form show lower levels of academic results when they procrastinate more passively.

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## 1. Introduction

Procrastination in academic situations is a very common phenomena, recent studies show that 70% of the university students report procrastination as being characteristic to their academic activities (Schouwenburg, Lay, Pychyl, Ferrari, 2004). Several studies examined the relationship between attitudes toward school, procrastination and academic performance (Tice & Baumeister, 1997; Elvers, Polzella & Graetz, 2003; Day, Mensink, & O'Sullivan, 2000; Schouwenburg, 1995; Solomon & Rothblum, 1984; Wolters, 2003; Klingsieck, 2013).

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Negative correlations were reported between procrastination and academic performance (grades) (Akinsola, Tella, & Tella, 2007; Beck, Koons, & Milgrim, 2000; Moon & Illingworth, 2005; Orpen, 1998; Tice & Baumeister, 1997; Wang & Englander, 2010), and attitudes towards courses in students attending online classes (Elvers, Polzella, & Graetz, 2003).

These results were supported by other studies, showing that high procrastinators perform below average on academic tasks (Van Eerde, 2003; Lakshminarayan, Potdar & Reddy, 2013), but procrastination has also positive aspects, as reported in studies investigating differences between active and passive procrastinators, the former showing more similar results with non-procrastinators in what academic performance is concerned (Hsin Chun Chu & Choi 2005).

Our research paper focuses on the differences between attitudes toward school, procrastination and academic performance among traditional and distance learning university students.

## 2. Method

### 2.1. Participants

The study sample consists of 162 (N= 162) participants, students of the Babes-Bolyai University, Faculty of Psychology and Educational Sciences. Participants were divided into two groups according to the type of education. The full time education sample consists of 79 (n=79) participants, with ages between 18 and 38 years (M=20.97, SD=3.15), 15 (19 %) male and 64 (81%) female, 48 (60.8%) first year, 29 (36.7%) second year and 2 (2.5%) third year students. The distance learning group consists of 83 (n=83) adults, with ages between 19 and 60 years (M=33.71, SD=9.35), 16 (19.3 %) male and 67 (80.7%) female, 31 (37.3%) first year, 46 (55.4%) second year, 3 (3.6%) third year students and 3(3.6%) students with prolonged period of study.

### 2.2. Instruments

#### Basic Information Form

Demographical data, general information regarding the form of current education, as well as data about the academic history (e.g. previously earned degrees, intention of quitting) and academic performance (cumulated results of the first semester) of participants was collected through an anonymous Basic Information Form.

#### Attitude Towards School Scale

The Attitude Towards School Scale is a 35 item scale which assesses the aspects of Attitude towards teachers and classes (7 questions), Attitudes towards school (faculty) (5 questions), Academic Self-perception (7 questions), Goal valuation (6 questions), Motivation/self-regulation (10 questions). The original scale was developed by McCoach and Siegle (2003). Participants were asked to evaluate on a 7-point scale (1 = not at all true; 7 = very true) what is their attitude towards the above mentioned elements of the academic learning process. Cronbach Alpha scores for our sample showed a very good reliability of the scale ($\alpha$= .94).

#### Scale of Active and Passive Procrastination

The scale is a 22 item instrument, combined from the 16 items of the Active Procrastination Scale developed by Choi and Moran (2009), and a 6 item Passive Procrastination Scale adapted by Chu and Choi (2005) based on the instrument of Mann (1982). The 22 items scale includes 5 subscales, as follows:

Outcome satisfaction: (4 reversed items), Preference for pressure: (4 reversed items), Intentional procrastination: (4 items), Ability to meet deadlines: (4 reversed items), Passive procrastination: (1 reversed and 5 normal items).

Participants were asked to evaluate the items on a 7-point scale (1 = not at all true; 7 = very true). Internal consistency reliability in our sample showed that the scale has acceptable reliability ($\alpha$= .69).

### 2.3. Procedure

The participants were asked to provide demographical data and completed the questionnaires in groups at the beginning of the academic courses.

Statistical Software (SPSS 20.0) was used for data analysis. Descriptive statistics, Pearson correlation and t-tests were used for comparison of the groups. Significance level was set at $p \leq 0.05$.

## 3. Results

Our primary goal was to assess the existing associations between types of procrastination and characteristics of academic attitude.

Table 1. Correlations between types of procrastinations and characteristics of academic attitude.

| | Academic self-perception | Attitude towards teachers and classes | Attitude towards school | Motivation/self-regulation | Preference for pressure | Intentional procrastination | Passive procrastination |
|---|---|---|---|---|---|---|---|
| Academic self-perception | 1 | ,503** | ,414** | ,479** | ,320** | -,269** | -,427** |
| Attitude towards teachers and classes | ,503** | 1 | ,695** | ,624** | ,124 | -,218** | -,410** |
| Attitude towards school | ,414** | ,695** | 1 | ,528** | ,083 | -,320** | -,360** |
| Motivation/self-regulation | ,479** | ,624** | ,528** | 1 | ,028 | -,315** | -,574** |
| Preference for pressure | ,320** | ,124 | ,083 | ,028 | 1 | -,192* | -,261** |
| Intentional procrastination | -,269** | -,218** | -,320** | -,315** | -,192* | 1 | ,474** |
| Passive procrastination | -,427** | -,410** | -,360** | -,574** | -,261** | ,474** | 1 |

**. $p< 0.01$, *. $p< 0.05$

There is evidence for positive relationship between preference for pressure in active procrastination and academic self-perception (Table 1.). Results suggest that intentional procrastination negatively associates with academic attitudes (e.g. attitudes towards school, motivation/self-regulation). Passive procrastination presents medium negative correlations with academic attitudes (e.g. motivation and self-regulation, academic self-perception, attitudes towards teachers and classes).

Table 2. Differences between full time and distance learners on attitude variables.

| | | M (SD) | $t$(df) | Sig. ($p$) |
|---|---|---|---|---|
| Attitude toward teacher | Full - time learners | 4.56 (.92) | -5.34(159) | .000 |
| | Distance learners | 5.33 (.90) | | |
| Attitude toward school | Full - time learners | 5.21 (1.03) | -3.56 (160) | .000 |
| | Distance learners | 5.77 (.97) | | |

Regarding the role of the form of education, full-time learners show a more negative academic attitude towards both teacher/classes and towards school (faculty) (Table 2.).

There is a medium negative correlation between academic performance and passive procrastination in the group of full-time students ($r= -.30$, $p< .05$). Also, in the group of distance students, we identified a negative association between the aforementioned variables ($r=- .42$, $p< .01$). The motivation and self-regulation of distance learning students correlates with academic performance ($r=.42$, $p< .01$).

Based on student's performance, there are significant differences in the type of procrastination used. Full-time low achiever students show a lower level of the ability to meet deadlines (M=4.26, SD= 0.78) than students with high performance (M=4.80, SD= 0.76) (t (39)= -2.22, p< .05). Compared to this result, low achievers are more prone to passively procrastinate (M=4.13, SD= 1.16) than high achievers (M=3.27, SD= 1.23) (t (39)= 2.26, p< .05).

The difference between low and high achiever students also appeared in the group of distance learners (M=3.48, SD= 1.09; M=2.09, SD= 1.13) (t (23)= 3.11, p< .01). The goal valuation variable presents higher levels in the high

achieving group (M=5.71, SD= 0.92) than in the group of low achievers (M=4.86, SD= 1.05) (t (23)= -2.09, p< .05). Differences also appear related to motivation and self-regulation: high achievers show a higher level (M=6.20, SD= 0.69) than low achievers (M=5.29, SD= 0.70) (t (23)= -3.20, p< .05).

## 4. Conclusion

Our first set of results suggests that there are weak to medium associations between some aspects of procrastination and the academic attitudes of students. Passive procrastination shows a negative relationship with attitude towards school, teacher and academic self-perception and motivation/self-regulation. Students who prefer time pressure when completing academic tasks have also a better academic self-perception. Intentional procrastination has a reversed association with attitudes towards school. Therefore we can conclude that passive procrastination is generally associated with more negative academic attitudes, while students who prefer working under pressure have a more positive academic self-perception.

When analyzing the differences between attitudes of full-time and distance learning students, we found that distance learning students seem to have a more positive attitude towards teacher and faculty.

Our second set of results focused on the characteristics of academic performance. Students from both types of educational form show lower levels of academic results when they procrastinate more passively. Also, the academic success of distance learning students is higher when the self-regulatory motivation is higher. Depending on the level of performance showed by students, there are different types of procrastination they use. Full-time low achievers have more problems meeting deadlines and are more prone to passively procrastinate, compared to high achievers.

The profile of distance learning students who have poor academic performance shows a low ability to meet goals and a lower level of motivation and self-regulation.

Future researches should assess the effects of specific task characteristics on academic performance. Presumably, tasks with higher time pressure and tasks with limited time pressure have different effects on academic results, and influence the tendencies to procrastinate. The associations between these variables, and the moderating role of task/course characteristics might influence the satisfaction with one's achievement, the attitude towards teacher and courses, respectively the attitude towards faculty.

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