Short Communication

Procrastination, personality traits, and academic performance: When active and passive procrastination tell a different story

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ABSTRACT

Our study examines the nomological network of active procrastination in comparison with passive procrastination. In particular, we examine the effects of the five factor model with the aim to understand which personality traits predict academic procrastination. We also test the effect of passive and active procrastination on academic performance to study the unique contribution of each type of procrastination. In a sample of 178 university students in Switzerland, we find that extraversion and neuroticism are related to active procrastination. Furthermore, active procrastination predicts GPA to a much greater extent than the five factor model and passive procrastination.

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1. Introduction

Procrastination has been considered a dysfunctional behavior or an irrational delay of behavior (Ellis & Knaus, 1977; Silver & Sabini, 1981) associated with negative outcomes. It has been defined as a *"voluntarily delay of an intended course of action despite expecting to be worse off for the delay"* (Steel, 2007, p.66). In particular, academic procrastination appears to concern over 50% of college students (Solomon & Rothblum, 1984) and has negative consequences such as cheating (Roig & DeTommaso, 1995) and low academic performance measured by GPA, assignment grades, quiz scores, and course grades (Kim & Seo, 2015; Steel, Brothen, & Wambach, 2001).

Counterbalancing the negative view that has dominated this field of research, Choi and Moran (2009) developed the construct of "active procrastination." The latter describes the behavioral characteristic that includes an individual's preference for time pressure, cognitive decision to procrastinate, capacity to meet deadlines, and ability to achieve satisfactory outcomes. From this perspective, active procrastination (vs. "passive procrastination" which denotes the undesirable aspect of procrastination) is a functional delay whereby an individual intentionally postpones his action and benefits from it (Alexander & Onwuegbuzie, 2007; Chu & Choi, 2005; Howell & Watson, 2007).

While some researchers have argued that purposeful delay is not procrastination at all (see for instance Pychyl, 2009), from a historical perspective the earlier meanings of procrastination reflected notions of sagacious delay or wisely chosen restraint (DeSimone, 1993). In fact, procrastination has been a prevalent phenomenon in history that was interpreted as a wise course of (in)action until the industrial revolution where it gained its negative connotation (Ferrari, Johnson, & McCown, 1995).

With the aim to provide empirical evidence of the unique contribution of each type of procrastination, we examine the nomological network of active procrastination in comparison with passive procrastination in an academic setting (see Fig. 1). We test if different personality traits predict different types of procrastination by using the five factor model (or the big five) whereby individual differences in terms of personality can be captured through five main traits (McCrae & Costa, 1997). These are: openness to experience (appreciating divergent thinking), conscientiousness (associated with competence and self-discipline), extraversion (tendency to be energized by social interactions and diverse activities), agreeableness (characterized by altruism and a cooperative nature), and neuroticism (tendency to experience negative emotions such as depression). In addition, we also test the relationship of passive and active procrastination and academic performance to study the effect of each type of procrastination on the outcome variable.

2. Methods

2.1. Sample and procedure

Our sample consists of students at a hospitality management school in Switzerland. In 2013, 290 students completed a personality questionnaire as part of an assignment in an Organizational Behavior course. In

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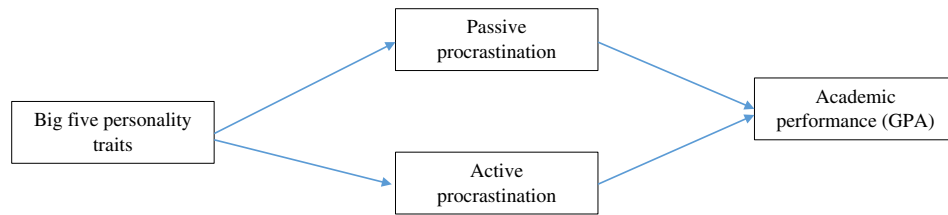
Fig. 1. Nomological network of active and passive procrastination.

2015, the same students were asked to fill out the procrastination surveys. In total, 178 participants completed all questionnaires (mean age: 22.62 ($SD = 1.59$; 61.8% of women). All participants were full-time students with an average university attendance of two years and two semesters of compulsory internship. The distribution of the participants' ethnicity is as follows: European (81%), Asian (11.2%), North American (3.3%), Arabic (2.2%), South American (1.7%), and Oceania (0.6%).

2.2. Measures

2.2.1. Big five personality factors

We used the 300-item International Personality Item Pool (IPIP-300) developed by Goldberg (1999) to measure the big five as this instrument possesses adequate psychometric characteristics (Goldberg et al., 2006). Participants used a 5-point scale ranging from 1 (very inaccurate) to 5 (very accurate) to respond to the items. Reliabilities for the five traits range from 0.87 to 0.95 and reliabilities for the 30 facets of the personality dimensions range from 0.59 to 0.90.

2.2.2. Passive procrastination

We used the 16-item Tuckman Procrastination Scale developed by Tuckman (1991) to measure passive procrastination. Participants responded on a 4-point scale ranging from 1 (that's not me, for sure) to 4 (that's me, for sure). Sample items include: "I needlessly delay finishing jobs, even when they are important", "I manage to find an excuse for not doing something", and "I am an incurable time waster." Reliability for this scale is 0.89.

2.2.3. Active procrastination

We used the 16-item Active Procrastination Scale developed by Choi and Moran (2009) to measure passive procrastination. Participants responded on a 7-point scale ranging from 1 (not at all true) to 7 (very true). The four dimensions of active procrastination are: ability to achieve satisfactory outcomes (e.g., "I achieve better results if I complete a task at a slower pace, well ahead of a deadline" (reverse coded)); time pressure (e.g., "I'm frustrated when I have to rush to meet

deadlines" (reverse coded)); cognitive decision to procrastinate (e.g., "To use my time more efficiently, I deliberately postpone some tasks.") and capacity to meet deadlines (e.g., "I often start things at the last minute and find it difficult to complete them on time" (reverse coded)). Reliability for this scale is 0.77 and ranges from 0.76 to 0.86 for the four dimensions.

2.2.4. Academic performance

We used the students' grade point averages (GPA) obtained from the administration department of the institution to measure academic performance.

2.2.5. Control variables

We controlled for gender (1 = female; 0 = male) and age.

3. Results and discussion

Table 1 presents the descriptive statistics and bivariate correlations between the main variables while Table 2 displays an in-depth analysis of the personality facets in relation to active procrastination. First, in regards to traits and procrastination, our results show that extraversion, agreeableness, and conscientiousness negatively correlate with passive procrastination. Extraversion refers to individuals' general tendency to approach social situations. Extraverts might not procrastinate because they are active and assertive individuals who enjoy engaging in multiple activities at a fast-pace rhythm and to take charge of the situation. Yet, our findings also demonstrate that this disposition is related to active procrastination. This implies that when such individuals engage in procrastination they do so deliberately with the aim to be more efficient.

Agreeableness alludes to the ability to relate to others and is, generally, a character trait shared by individuals who are considerate and cooperative. Agreeable students might not engage in passive procrastination because they are mindful of others who might be dependent on the tasks they need to complete.

In line with previous research, conscientiousness is negatively associated with (passive) procrastination (Johnson & Bloom, 1995; Schouwenburg & Lay, 1995; Watson, 2001). Students who score high

Table 1
Descriptive statistics and correlations.

	M	SD	α	1	2	3	4	5	6	7	8	9	10	11
1. Passive procrastination	2.53	0.67	0.89	–										
2. Active procrastination	3.41	0.51	0.77	0.00	–									
3. Preference for pressure	3.60	0.93	0.86	−0.17*	0.76***	–								
4. Intentional decision	2.85	0.85	0.77	0.40***	0.34***	−0.13	–							
5. Ability to meet deadlines	4.02	0.73	0.77	−0.54***	0.45***	0.33***	−0.30***	–						
6. Outcome satisfaction	3.15	0.86	0.76	0.25**	0.82***	0.56***	0.20**	0.14	–					
7. Extraversion	216.32	23.08	0.90	−0.16*	0.19*	0.28***	−0.07	0.15*	0.09	–				
8. Agreeableness	214.05	22.54	0.89	−0.23**	−0.02	−0.02	−0.16*	0.26**	−0.08	0.11	–			
9. Conscientiousness	221.10	26.81	0.93	−0.49***	0.09	0.09	−0.09	0.43***	−0.16*	0.20**	0.32**	–		
10. Neuroticism	169.40	33.55	0.95	0.33***	−0.17*	−0.22**	0.06	−0.21**	−0.04	−0.42***	−0.22**	−0.41**	–	
11. Openness to experience	218.97	21.54	0.87	0.03	0.10	0.05	0.14	−0.02	0.04	0.44**	0.23**	0.07	−0.22**	
12. GPA	4.98	0.27	–	−0.43***	0.13	0.16*	−0.17*	0.36***	−0.02	−0.05	0.12	0.30***	−0.02	−0.19*

  * p < 0.05, two-tailed.
  ** p < 0.01, two-tailed.
*** p < 0.001, two-tailed.