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Academic Procrastination and Factors Contributing to Its Overcoming

Abstract

Procrastination is generally understood as the practice of irrationally putting activities or tasks off to a later time. In the case of academic procrastination, it is a tendency to put off academic tasks. The main objective of the presented research study was to map strategies of Slovak university students used for overcoming academic procrastination, as well as to test the relationship of procrastination with potential protective factors – volitional regulation and achievement motivation. Based on the results of our research, strategies of social motivation and positive attitude are, on average, the most frequently used to overcome academic procrastination. Results of the research also confirmed a negative correlation of procrastination with volitional regulation and its dimensions, as well as with some dimensions of achievement motivation.

Keywords: *academic procrastination, volitional regulation, achievement motivation, strategies for overcoming procrastination, university students*

Procrastination may be briefly characterized as the irrational tendency to delay tasks that need to be completed at a certain time (Lay, 1995). So far, this phenomenon has not had a universal, generally accepted definition. However, most of its definitions emphasize its negative aspects – it is illogical postponement of activities despite the fact that the individual expects negative consequences of putting the task off (Steel, 2007). Often, already the postponement itself is connected with experiencing tension and discomfort (Solomon, Rothblum, 1984).

It follows from the above that procrastination is primarily understood as a certain type of behaviour. However, the concept of procrastination may be understood also as a personality characteristic or trait (Schouwenburg, 2004), thus in terms of a relatively stable tendency to procrastinate. J.R. Ferrari (2004) identified so-called chronic procrastinators with the trait procrastination. C.H. Lay (1995) defined trait procrastination as a repeated dilatory and postponing behaviour and he identified everyday confrontations with time gaps, intentions and actions as the main feature of chronic procrastinators.

Academic Procrastination

Some people procrastinate their obligations only from time to time, others postpone fulfilment of their tasks almost always (general procrastination) and some are characterised by putting them off only in certain specific contexts (situational procrastination). *Academic procrastination* may be considered as a certain form of situational procrastination, linked with school settings connected with meeting and observing various deadlines.

In their research, L.J. Solomon and E.D. Rothblum (1984) found out that as many as 50% of students procrastinated regularly and approximately 38% procrastinated occasionally. Results of other foreign studies indicate up to 80–95% of procrastinators (Steel, 2007). One of our previous studies on a sample of Slovak university students identified 68% of trait procrastinators (Nábělková, Rendveiová, 2009).

N. Milgram and R. Tenne (2000) proposed and empirically confirmed the concept of academic procrastination including three basic areas: appraisal, anxiety and avoidance. Appraising academic tasks as difficult and stressing leads individuals to more frequent avoidance of these tasks, and this is accompanied with their experiencing increased anxiety. Failure to fulfil academic obligations in time increases negative consequences and further avoidance of the activity follows.

Thus, it is not only poor time management or a low level of student abilities that underlie academic procrastination. In addition to the above-mentioned anxiety, also other factors were proposed, potentially leading to procrastinating behaviour, e.g. indecision, reluctance towards self-regulation, lack of assertiveness, fear of possible failure, dislike of the tasks to be fulfilled, or also a too perfectionist approach (Özer et al., 2009).

By means of a meta-analysis of previous studies, P. Steel (2007) found out that strong predictors of procrastination are, among other things, low consci-

entiousness associated with low self-control and/or self-regulation and lack of achievement motivation. These are the very factors focused on also in our study on academic procrastination in Slovak university students.

Volitional Regulation

A characteristic feature of studying at university is relatively distant goals. Getting a reward, such as passing an exam, may be considered a goal distant in time. In between, students are confronted with stimuli, activities or tasks which are less important, but of current interest. Thus, eventually, preparation for an important exam becomes subjectively less important and students put off obligations associated with the exam to a later time. Such situations of current interest, containing a conflict with long-term goals, place high demands on the individual's self-regulatory properties used to direct his or her experiencing and behaviour.

Regulation is a complicated process during which the individual often has to give up activities he or she likes to undertake, or, on the contrary, has to undertake activities that are not to his or her liking. The self-regulation model by B.J. Zimmerman (1990) includes self-regulatory processes used during the activity itself (e.g. processes of self-control and introspection). The basis of these processes is emotional control protecting concentration and effort from distraction.

According to M. Nakonečný (1997), the concept of volition includes processes as well as a set of personality volitional properties, while forming a unity, since volitional properties are directly involved in the volitional regulation of behaviour. In general, it is the volitional properties that reflect the ability of self-control and self-regulation that manifests itself in suppressing unwanted tendencies and in the effort exerted to overcome obstacles, or in setting and attaining more distant goals (Nakonečný, 1997). In the context of our study, we focused on the volitional properties of decisiveness, persistence and self-discipline in connection with academic procrastination.

V. Kubáni (2010) defines *decisiveness* as the ability to make a decision in a fixed time, in given living conditions, while the individual's decision is attested to by practice and time. This property does not include only the decision itself, but also carrying the decision out. According to the author, *persistence* ensures that the decision is carried through, mainly if there are obstacles and disturbances. *Self-discipline* may be considered as the ability to control one's own behaviour and to avoid anything unwanted. It is also the ability to control one's own impulses and affects (Kubáni, 2010).

Achievement Motivation

Several authors consider academic procrastination to be primarily a problem of motivation including more than only poor organizational skills or laziness (Ferrari et al., 1995; Lee, 2005). In behaviour regulation situations where certain performance should be delivered, not only specific abilities, but also the need to achieve a certain performance standard, are manifested. Individuals with the same abilities in a given area achieve a different level of performance precisely depending on their motivation (Kubáni, 2007). Achievement motivation may be defined as a total of internal dispositions stimulating an individual to achieve good results in various types of activities (Sejčová, 2007).

Within the model of achievement motivation, W. Atkinson and D.C. McClelland (as cited in Sejčová, 2007) described certain elements that may be applied also to student academic activities. First of all, students must be convinced of achieving success in their future activity. In addition, they must find the activity meaningful, so that they activate cognitive processes linked to the goal-orientation. Thus, goal setting depends on the likelihood of success and on the value of the goal to be achieved. The level of achievement motivation, then, derives from this.

Research Objective and Questions

University students have a specific system of schooling, within which they are confronted with a time distance from the final goal (a passed exam, a submitted project, etc.) and with current incentives that may defer the planned work (time spent with friends, on the internet, etc.). Students achieve their goals also through their self-regulatory and motivational characteristics. Our research focused on the examination of the relationship between academic procrastination and achievement motivation and volitional regulation, with the ambition to support the assumption that the given constructs may be considered protective in relation to procrastination.

In addition, our objective was to map strategies used by university students to overcome procrastination. Thus, we were looking for answers to the following research questions:

RQ1: What strategies for overcoming procrastination are most frequently used by university students?

RQ2: Is there a relationship between academic procrastination and volitional regulation or its dimensions (decisiveness, perseverance, self-discipline)?

RQ3: Is academic procrastination related to the dimensions of achievement motivation (achievement motive, anxiety improving achievement and anxiety hindering achievement)?

Research Sample and Methodology

Our research sample (obtained by occasional sampling) consisted of 174 Slovak university students (average age of 22), 147 women and 27 men, studying at Matej Bel University and Medical University in Banská Bystrica and at Technical University in Zvolen. The following courses of study were represented: social, economic and legal sciences (48%), upbringing and education (38%), agricultural sciences (6%), humanities (5%) and medical care (3%). The respondents anonymously and voluntarily filled in a research set of questionnaires, in both paper and electronic form.

The research battery consisted of the following:

- *Aitken Procrastination Inventory* by the US psychologist M. Aitken (in: Ferarri et al., 1995). This one-dimensional inventory consists of 19 items dealing with procrastination in academic conditions – mainly in preparation for school, observance of school deadlines and work scheduling. Participants respond to the items on a 5-point agree/disagree scale. Cronbach's alpha (0.87) calculated for our sample indicates sufficient internal consistency of the inventory.
- *Inventory of Strategies for Overcoming Procrastination*, created by the authors of this study, with the aim to find out the frequency of individual strategies used, helping students to overcome the tendency to postpone their obligations. 22 items of the inventory offer strategies relating to the activities of planning, tasks scheduling, rewards, communication with fellow students, visions of success or failure, reminders setting, etc., which are rated by respondents on a 5-point frequency scale. Respondents may also add their own strategies for overcoming procrastination (not mentioned in the questionnaire) in the last, open item.
- *Volitional Regulation questionnaire*, compiled for the purpose of a previous study on the procrastination – self-regulation relationship (Nábělková, Ledajová, 2013), consisting of 18 items with a 5-point agree/disagree scale. The total score shows the level of *volitional regulation* (Cronbach's alpha 0.86, for our sample), where 5 items refer to the volitional dimension of *decisiveness* (Cronbach's alpha 0.68), 5 items refer to the dimension of *persistence* (Cronbach's alpha 0.56) and 8 items to the dimension of *self-discipline* (Cronbach's alpha 0.78).

- *Questionnaire of Achievement Motivation*, used as a standardized tool to measure achievement motivation (Pardel et al., 1992). It captures three dimensions: *achievement motive* (including the level of aspiration, effort for a high social status, persistence, time orientation on the future, etc.), *anxiety hindering achievement* (reflecting self-reported lower achievement, lower readiness and activity when in tension, in critical, stressful and new situations and *anxiety improving achievement* (captured by the positive effect of moderate tension on achievement in terms of mobilization of activity). Respondents answer by means of a 4-point scale by the degree of relevance of a particular item for themselves.

The data were statistically processed using the SPSS software. Whereas the distribution of the most of the studied variables significantly differed from the normal distribution (tested by the Kolmogorov-Smirnov test), Spearman's non-parametric correlation coefficient was used. Answers to the open items of the *Inventory of Strategies for Overcoming Procrastination* were categorized by content analysis.

Research Results

Within the first research question we asked about the most frequently used strategies for overcoming procrastination. University students indicated the frequency of their use of each of the 22 offered strategies on a scale from 0 (never) to 4 (always). It can be stated that socially oriented strategies (social motivation, social encouragement), positive approach (positive attitude, vision of success in the future and/or in the past), and scheduling for a suitable time seem to be used the most frequently. Table 1 shows the first ten strategies for overcoming procrastination, indicated, on average, as the most frequent by our respondents.

Within the open item, 25 respondents wrote about their own strategies for overcoming procrastination. Categories of these strategies are shown in Table 2 with specific examples.

Table 2. Strategies for overcoming procrastination suggested by respondents (N=25)

Categories of strategies	Content – specific examples	Frequency
Planning activities (work list and schedule)	<p>“Schedule time intervals for work and breaks.”</p> <p>”During weekend – updating the things necessary for a given week, checking the list from the previous week.”</p>	6

Categories of strategies	Content – specific examples	Frequency
Social motivation and co-operation	<i>“Agreement with friends on doing the work together, mutual support.”</i>	4
Non-distracting conditions	<i>“Working alone, undisturbed.”</i> <i>“Ensuring absolute silence (e.g. earplugs).”</i>	3
Urgency	<i>“Doing everything in the morning.”</i> <i>“Trying to do all tasks as soon as possible, and then relax”.</i>	2
Vision of unpleasant consequences	<i>“Vision of failure, stress and doing the activity again.”</i>	2
Inner satisfaction	<i>“Work well done.”</i> <i>“Praise.”</i>	2
Positive visions	<i>“Vision of easy progress of the task.”</i> <i>“Belief in the ability to do the task.”</i>	2
Work under pressure	<i>“Stress inspires better outcomes.”</i>	2
Financial reward		1

The second research question concerned the relationship between academic procrastination and volitional regulation, or its dimensions. The calculated correlation coefficients indicate that there are relatively highly statistically significant negative relationships between procrastination and the overall volitional regulation, as well as the dimension of self-discipline. Academic procrastination shows moderately close negative relations also with the volitional dimensions of decisiveness and persistence. Results of the correlation analysis concerning the second research question are presented in Table 3.

Table 3: Correlation Coefficients for Academic Procrastination and Volitional Regulation and/or its Dimensions (N=174)

	Volitional regulation	Decisiveness	Persistence	Self-discipline
R	-0.51**	-0.28**	-0.39**	-0.58**

* p<0.001

Finally, the third research question dealt with how academic procrastination is related to the dimensions of achievement motivation. According to the results of the correlation analysis, there is a significant moderately close negative relationship between procrastination and the achievement motive. As for anxiety, the anxiety hindering achievement is essentially unrelated to procrastination, but a weak, nevertheless statistically significant positive relationship was recorded between

procrastination and the anxiety improving achievement. Results of the correlation analysis concerning the third research question are summarized in Table 4.

Table 4: Correlation Coefficients for Academic Procrastination and Dimensions of Achievement Motivation (N=174)

	Achievement motive	Anxiety improving achievement	Anxiety hindering achievement
R	-0.29**	-0.20*	-0.10

* $p < 0.001$; ** $p < 0.01$

Discussion

Based on the study on scientific literature as well as on specific experience of university students, a research tool was designed, including various strategies for overcoming procrastination, which our respondents were asked to assess in terms of the frequency of their use. The most frequent strategies found in the Slovak university students participating in our research are confronted with professional intervention and counselling theses of foreign authors within the discussion.

It can be stated that the so-called social motivation including co-operation in a group and contact with people working on a similar task proved to be the most frequently used strategy. Students probably need to make sure of their situation and to compare it with the situation of others within their study group. The other frequent way of overcoming academic procrastination was receiving social encouragement from close persons. Similar socially-oriented strategies are also used within foreign intervention programmes focused on procrastination (Schouwenburg et al., 2004).

According to several authors (Ramsay, 2002; Pychyl, Binder, 2004), optimism, elimination of negative thinking, and strengthening of perceived self-efficacy are the basis for overcoming obstacles in the fulfilment of academic tasks and obligations. Also within our research, the students indicated a positive attitude and vision of success as frequently used strategies for overcoming procrastination. In general, it can be stated that people embark on a goal-directed activity and persist in their effort to achieve the goal if they are sufficiently sure that they will succeed.

Successful studying requires, among other things, skills in planning, organization of study, and/or time management. Within our research, the students indicated planning and embarking on an activity without any delay and/or in a suitable time as other frequent strategies for overcoming procrastination. This,

again, corresponds to the recommendations of the authors dealing with procrastination, who emphasize regularity of work, effective time management, control of disturbing stimuli, and the need not to undervalue the time required to finish the task (Ferrari et al., 1995; Schouwenburg et al., 2004). Strategic planning of study, optimum time scheduling and effective management of obligations are also greatly emphasised within intervention programmes focused on academic procrastination (Topman et al., 2004; Pychyl, Binder, 2004).

When looking for protective factors in relation to academic procrastination, it was assumed that the level of procrastination would decrease with the increase in volitional regulation. Since volition can be described as a conscious effort mobilizing energy and directed to overcoming obstacles, it can be expected that the level of volitional regulation will be lower in procrastinators when compared with non-procrastinators. Our results confirm this assumption. We found a negative relationship between academic procrastination and the overall volitional regulation as well as its partial dimensions. This relationship was the strongest for the dimension of self-discipline; it was relatively strong also for persistence. The negative correlation of academic procrastination with self-discipline and persistence (although less strong) had been found in the university students also within one of our previous studies (Nábělková, Ledajová, 2013). However, in that research – as opposed to this one – no negative relationship between academic procrastination and decisiveness was proved. The connection of the level of procrastination with indecision, found in this research, may be theoretically supported by the existence of the specific type of the so-called decisional procrastination, consisting in an individual's inability to make a decision within a specified time (Ferrari et al, 1995). Within another of our previous studies on procrastination and decision-making styles (Nábělková et al., 2009) a positive relationship between trait procrastination and shifting responsibility for a decision and postponing a decision had been also found empirically. According to our findings, all the three dimensions of volitional regulation (self-discipline, persistence and decisiveness) can thus be considered predictors of a lower tendency to procrastinate in academic conditions.

The results of our research indicated a negative relation between academic procrastination and the achievement motive. Despite the fact that this relation is of lesser strength than the relationships found between self-discipline and persistence, it is also a provable and statistically significant one. Several authors (Ferrari et al., 1995; Lee, 2005; Steel, 2007) consider academic procrastination as a problem of motivation, or associate it with low achievement motivation. L. Pašková (2008) specifically indicates that individuals with a high level of the achievement motive proceed more effectively with their work on various tasks, need less time for the

tasks and more rarely give up when solving them. Within our previous research on procrastination and coping strategies in university students (Nábělková, Rendveiová, 2009) a significantly higher tendency to disengaged behaviour, which is a logical opposite of the high level of the achievement motive, was empirically determined in procrastinators in comparison with non-procrastinators.

Despite the fact that – based on the existing models of procrastination (Solomon, Rothblum, 1984; Milgram, Tenne, 2000) – we expected a relationship between academic procrastination and anxiety hindering achievement; no such relationship was proved in our research. On the other hand, our results proved a positive relationship between procrastination and anxiety improving achievement. Also “work under pressure”, to which the student attributed stimulation for better performance, appeared among the answers to the open question regarding one’s own strategies for overcoming procrastination. J.F. Ferrari et al. (1995) defined, in addition to other types of procrastination, also the so-called arousal procrastination, where certain anxiety (particularly time anxiety) causes thrill and the generated tension has an activating effect on the procrastinator. However, we do not consider the strategy as optimal, since the final outcome of the “work under pressure” can be under the real potentiality of procrastinators.

Conclusion

So far, in Slovakia there has only been a very little research interest in the phenomenon of procrastination and systematic application of existing knowledge in the educational practice was practically non-existent, although there are some thematic overlaps, e.g., with the issue of learning styles, in which one component is the approach to learning (Kaliská, 2013). The results of our study contribute to the issue of academic procrastination in our cultural context by confirming the negative relationship between academic procrastination and volitional regulation and the achievement motive, as well as the empirical evidence of real applicability of some strategies for overcoming procrastination. Further research is recommended in the area, since understanding academic procrastination may facilitate practical interventions not only by students, but also by competent professionals.

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