American University of Central Asia

Psychology Department

Academic Burnout, Academic Procrastination and GPA in junior and senior students of the American University of Central Asia

By

Firuza Fynchina

Academic supervisor: Elena Molchanova

A Research submitted to the Psychology Department of American University of Central Asia in partial fulfillment of the requirements for the degree of Bachelor of Arts

May, 2012

Bishkek, Kyrgyz Republic

Abstract

Current research investigates the relationship between academic burnout, academic procrastination and its influence on GPA among junior and senior students of American University of Central Asia. There were several hypotheses. It was assumed that burnout is significantly correlated with procrastination. In turn, both these variables affect academic success. It was supposed the more burnout a student has, the lower GPA he/she earns. It was also assumed that procrastination influences on academic success in positive way and might be considered as an adaptive strategy of studying. In this study there were several questionnaires used: standardized burnout questionnaire by Shirom & Melamed (2006), procrastination scale by Tuckman (1991) and original questionnaire developed for the purposes of this study which measured students' procrastinating experience in relation to academic performance. Total number of participants was 60 people, 30 females and 30 males. Results showed that burnout and procrastination are significantly correlated. Our hypothesis about relationship of burnout and academic success was not supported by statistics. However there was found a tendency that students with higher GPA tend to have lower burnout scores. The analysis of procrastination and academic success didn't show direct relationship and impact on GPA, but described in what way procrastination might influence on academic success both in positive and negative ways. All the findings and ideas of this research will contribute to the field of educational psychology, higher education development field and might be useful in curriculum of academic courses development.

This research is dedicated to the investigation of the relationship between academic burnout, academic procrastination and to exploration of their influence on academic success.

Burnout and procrastination became popular notions in educational psychology, organizational psychology and social psychology. These concepts are very popular for scientists to research because of their universality, broad extent of relations to other psychological phenomena and because of real implementation of research results into improvement of the settings where this problem exists. This research will try to relate the concept of academic burnout and academic procrastination together as it was not considered together before. The arguments for supporting this relationship are going to be provided further.

The notion of burnout has been investigating since seventies and usually was referred to the field of work. Maslach describes burnout as "a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind" (Morgan & De Bruin, 2010, p.183). Another more recent definition states: "Burnout is characterized by emotional exhaustion, physical fatigue, and cognitive weariness, resulting from prolonged exposure to work-related stress" (Melamed, Shirom et al., 2006).

The discourse of burnout could be delved back to the times when the notion was referred only to a special group of people such as social workers, people who provided other human services and educational professions (Pisarik, 2009). Later on, the researchers start focusing on other groups of people who might suffer from burnout. Nowadays there are researchers who admit that burnout can be observed in students in the framework of study, because burnout seems to be a problem in every field where a person is facing with distress or any other constant tensing emotional or physical conditions. The study of burnout has been

unnecessarily limited to the helping professions, but it is experienced by a variety of occupational groups beyond nurses, teachers, and social workers (Cordes & Dougherty, 1993, p.621). There are specialists who believe that burnout is a responsive pattern to a demanding environment. Therefore, most common environments for burnout development are work and study. “Burnout is a distinctive aspect of stress in that it has been defined and studied primarily as a pattern of responses to stressors at work” (as cited in Cordes & Dougherty, 1993, p.625). “The burnout response syndrome begins to a great extent as a result of demands…” (Cordes & Dougherty, 1993, p.625) One of the arguments that support the existence of academic burnout is cited in Morgan’s and De Bruin’s research: “students are confronted with experiences that [are] physically, emotionally, and psychologically challenging” on a daily basis. As a result, many students are vulnerable to stress and burnout (Morgan & De Bruin, 2010, p.183). Researchers began thinking that students might have burnout, because of the intense lifestyle of students-workers or students-parents (Koeske & Koeske, 1991). This population considered to have strain that was further developed into a concept of burnout. Etzion inferred: “Strain is conceptualized as a negative affective response by the individual to ongoing context-specific stress… It includes a sense of being overburdened, exhausted, drained, inadequate, or pressed beyond what is comfortable or possible” (Koeske & Koeske, 1991, p. 416). Outcomes include health and mental health consequences (e.g., symptoms, behavioral consequences like job dissatisfaction or quitting one's job) that result from long-continued experiences of unabated strain (Koeske & Koeske, 1991, p.416). College students may in fact experience the burnout phenomenon due to learning conditions that demand excessively high levels of effort and do not provide supportive mechanisms that would facilitate effective coping (Neumann, Finaly-Neumann & Reichel, 1990, p.20). Nowadays one of the definitions accepted was created by Freduenberger. He describes burnout as failure, attrition or exhaustion as a result of the

excessive use of power, energy, and other individual sources (Aypay, 2011). In the student population, Morgan & De Bruin, cite: "burnout is described as erosion of academic engagement entailing exhaustion due to study demands, cynical attitudes toward studies and feelings of incompetence as a student" (Morgan & De Bruin, 2010, p. 183).

Thus, having the clear definition, when researchers investigate student's burnout and outcomes of its presence there are works that imply the development of special scales measuring burnout in students or on modifying classical scale of job burnout by Maslach (Law, Koeske & Koeske, 2010). The researchers, who tried to develop scales for student burnout stated that this notion has strong enough construct validity: "Previous use of this measure in research spanning a 10-year period has shown it to have satisfactory construct validity: It has detected both predicted main and buffering effects in research on work and student stress (Koeske & Koeske, 1989, p. 421).

Since there are already research focusing on student burnout based on their results it is possible to assume that burnout influence on motivation to study, absenteeism, academic success, presence of psychological symptoms, productivity and even intention to drop out from school. Pisarik (2009), investigated the relationship between academic burnout and motivational orientation. Apparently, the results suggest that intrinsic motivation to attend college was associated with lower levels of burnout, while amotivation and external regulation were associated with higher levels of burnout. Identified regulation was negatively related to one dimension of burnout (i.e., professional efficacy). The results and their implications for practice and future research are discussed in the context of self-determination theory (Pisarik, 2009).

It is important to note that the phenomenon of academic burnout does not depend from culture background. Because there were research that found out the presence in both western and eastern cultures (Yoneyama, 2000; Gan, Shang & Zhang, 2007; Aypay, 2011;

Jennings, 2009). Aypay summarized the influence of burnout in students on absenteeism and intention to leave: “School burnout describes excessive demands of schooling and education over students. In learning process, stress emerged from courses, heavy coursework or other psychological pressures may lead to emotional exhaustion, desensitization tendency, and feeling of low achievement. School burnout, in turn, may lead to absenteism, low motivation to courses, and high dropout rates” (Aypay, 2011, p.521). Koeske et al. predicted that student burnout will mediate the effect of stress on outcomes if potentially extraneous variables such as employment, student status, income, age, and nonstudent stress and the effects of support are controlled. Outcomes include both psychological symptoms and intention to quit school (Koeske & Koeske, 1989). Another research that emphasizes that one of the reasons of school absenteeism is burnout was made by Yoneyama (2000). The thing is that in Japan, the concept of school burnout is related to school phobia or school refusal, the view that it constitutes the common denominator between those students who miss the majority of the classes. “In fact, numerous accounts by students indicate that 'burnout' is the commonality between school phobia and school refusal in Japan” (Yoneyama, 2000, p.78). Jennings supposed that medical students are at most group risk to have academic burnout. He believes that exhaustion, depersonalization and diminished sense of accomplishment are indicators of academic burnout and at the same time common phenomena among medical students. The scientist analyzes possible causes of academic burnout and tries to develop better conditions for students, because claims that the consequences of the medical student burnout influences on student health, professionalism and patient care (Jennings, 2009).

Nowadays researchers also have tried to find the relationship between the locus of control, coping flexibility and student burnout. In the research there was an attempt to predict burnout. The results showed that two components of coping flexibility were significant and more successful over the locus of control variable in predicting burnout. In addition, this

research showed that locus of control can be represented as a construct indicating general expectancy, but not the determinant of burnout (Gan, Shang & Zhang, 2007). Sweden scientists also researched medical students in order to explore the level of burnout based on self esteem which was based on high performance. The major finding of this study on medical students was that poor self-rated health was significantly associated with exhaustion but not with the disengagement dimension of burnout (Dahlin, Joneborg & Runeson, 2007, p.46). The general findings supported the idea that high performance self esteem indeed associated with burnout, but not with poor health.

One of the most interesting conceptual frameworks of academic burnout provided Neumann, Finaly-Neumann & Reichel (1993). They suggested that burnout occurs because of mutual interactions between student and "academic institution". Burnout may result from learning conditions that demand excessively high levels of effort and do not provide supportive mechanisms, that is, quality of learning experience components that would facilitate effective coping (Neumann, Finaly-Neuman & Reichel, 1993, p. 22). They also suggest us to consider: "…direct and indirect inputs that they [students] receive from their college. By direct inputs, we mean college investments in the educational program in terms of content, resources and flexibility, whereas indirect inputs consist of the processes by which colleges attempt to enhance learning, for example, student-faculty contact and intrinsic involvement in academic programs" (Neumann, Finaly-Neumann & Reichel, 1993, p.22). However the main findings of their research were that burnout is not related to the content of courses and resources students receive. But it doesn't mean that the rest patterns of learning experience are not related to burnout. Thus, the more students are involved and flexible in study, the less they experience emotional exhaustion. Another finding showed that the more emotional exhaustion student experiences the less he/she feels accomplishment in study (Neumann, Finaly-Neumann & Reichel, 1993). These findings suggest us that our assumption

about presented burnout and its impact on academic success has a right to exist. Because if students do not feel accomplishment in study due to burnout they are not that committed to it. Following this way they might procrastinate and it might have a result on academic success.

Another concept which is going to be investigated and discussed is academic procrastination. Academic procrastination is defined as an irrational tendency to delay at the beginning or completion of an academic task (Yong**,** 2010). The purpose of their study was to research the assertiveness and academic procrastination of a particular course among students in Malaysia. Results of the study indicated that English and Communication Skills students procrastinated somewhat due to indecisiveness, low self-esteem, task aversiveness, laziness, time management problems, perfectionism, and lack of assertion (Yong, 2010).

The researchers summarized: "Many tertiary students intend to complete their academic tasks within the time frame, but they lack the motivation to get started. Due to their self-defeating behavior, academic procrastinators often experience dire consequences, including low self-esteem, depression, and academic failure due to task avoidance and fear of failure" (Yong, 2010, p. 63). Young interprets: "academic procrastinators have the tendency to avoid activities, using excuses to justify delay and avoid blame (Yong, 2010, p.63). There were other research done by Noran (2000), Solomon & Rothblum, 1984; Tuckman (2002), suggested that procrastinators try to avoid unpleasant task by entertaining themselves, substituting it with the activity they prefer to do. They reward themselves in advance, but not after they complete the task (Yong, 2010).

Milgram et al. summarized in their research that procrastination in XX century was researched as phenomenon related to different types of anxiety, including fear of failure, test anxiety, social anxiety and self consciousness (Milgram, Dangour & Raviv, 1991). As we see, the majority of studies are focusing on the finding the relationship between procrastinating behavior and personal factors. There are number of studies which explored

the relationship between procrastinating behavior and frustration tolerance, hard-driving and competitiveness, time urgency factor, self esteem, achievement motivation, depression, fear of success, fear of failure, extraversion, pessimism, locus of control and anxiety (Sharma, 1997). There is also number of research projects which focused on external or situational factors. Professor Sharma says: “Both personality and situational correlates of procrastination for three different achievement tasks were studied by Taylor (1979). He found very little relationship between students' personality variables (locus of control, achievement motivation, and achievement anxiety) and procrastination scores across all tasks. The major correlates of procrastination were the measures of importance for the course or grades and degree of liking of the course. Similarly, Coote (1988) found workers perceptions of job factors to be more important than workers predispositions to delay in explaining procrastination at work. But, the results of the study by Soloman and Rothblum (1984) revealed that fear of failure accounted for 49.4 per cent of the explained variance, and task aversiveness and lack of energy for 18.0 per cent. Study by Schouwenburg (1992) with students in the Netherlands yielded similar factors loadings Milgram, Batori and Mowrer (1993). In their study with female students, Milgram, Dangour and Raviv (1992) found situational requirement for trait behavior relations to emerge (Sharma, 1997, p 20).

For this particular research following investigations are the most important. These are ideas developed by Albert Bandura. He made a great contribution into social cognitive psychology. Bandura dedicated his investigations to social cognitive theory. There are two concepts in this theory that might explain us what are possible reasons for procrastinating. First notion is perceived self efficacy. According to Bandura, perceived self efficacy is a belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, 1995, p. 2). In turn, perceived self efficacy is related to the concept of self regulation. Self regulation in academic framework is an extent to which students

cognitively, emotionally, behaviorally and motivationally regulate their learning process. The higher the self regulation is, the higher the academic achievement was shown (Bandura, Zimmermann & Martinez-Pons, 1992). Researching perceived self efficacy, self regulation and its impact on academic success it was suggested that procrastination might be considered as a failure in self regulation. Because it is assumed that if procrastination is presented, a person emotionally, cognitively and behaviorally does not regulate learning process. Therefore, it means that person's self regulation is low. Bandura summarized ideas of Meister and Heatherton' s saying that self regulation is a very important factor in the situation of discrepancy between the "outside" or external feedback and person's actions, emotions and cognitions towards this feedback. Self regulation is basically needed to reduce this discrepancy (Bandura, 1996). There are several ways of reducing the discrepancy:

> Some assuredly generate better strategies and redouble their efforts to match their internal standard, others lower their standard and become resigned to a humbler aspiration, still others continue to impose on themselves the elusive standard but debilitate their efforts through gnawing despondency, and some, surprisingly, even raise their standard in the face of failure (Bandura, 1996, p.20).

He concluded that it is a challenge to understand why the same "external feedback" or "external standard" provokes so variable cognitive, behavioral, affective and emotional performance. However, stated that perceived self efficacy is a good predictor of self regulation (Bandura, 1996).

In one of the most accomplished works "Self-Efficacy: The Exercise of Control" (1997) Bandura says:

> In managing task demands, people who have developed their self-regulatory capacity not only do what needs to be done more efficiently but spare themselves a lot of needless strain. Failure to complete academic assignments makes educational pursuits aversive. Failure to perform the tasks of one's trade well and on time makes occupational pursuits stressful and insecure. When self-regulatory skills are lacking, people defer tasks to the last moment and do them minimally or not at all. Competencies that can be cultivated only through sustained effort remain underdeveloped. Moreover, when people procrastinate in doing required tasks, thoughts about what they are putting off continuously intrude on, and detract from, their enjoyment of other activities they are pursuing.

Bruce Tuckman, inventor of Procrastination Scale tried to check how procrastination is related to self regulation and use of rationalization of actions. It was found that the higher the level of procrastination was, the lower self regulation was reported and high rationalization was used to defend procrastination (Tuckman, 2002). Tuckman also adds: “The findings that procrastinators perform more poorly academically and rationalize their postponement of action, reinforces the supposition that beliefs in working better under pressure or being able to start late and still succeed are indeed rationalizations that enable academic procrastinating behavior to persist even in the face of failure” (Tuckman, 2002).

Up to this point his attitude about procrastination seems negative. According to Bandura, people who procrastinate are not capable to perform successfully and rationally towards the external standard. But what is interesting, two years later he says: “Unless people believe that they can produce desired effects by their actions, they have little incentive to act” (Bandura, 1999, p.214).

Some researchers believe that there are either only procrastinators or non procrastinators. They believe that procrastinators behave in self-handicapping manner to maintain their self esteem, time waste, poor performance and increased stress (Chu & Choi, 2005, p.246). Seo summarized that there are scientists who consider procrastination little effect on academic achievement, because it brings flow to the education and it is an adaptive strategy of studying. But as well, it was mentioned that procrastination is correlated with anxiety and stress and actually might disturb the flow. "…high level of procrastination was associated with a low incidence of flow state. She [researcher] argued that the more students procrastinate the less likely they are to experience the flow state in learning processes (Seo, 2011, p.210). The result of Seo's research has shown that students who procrastinate actually have less success in academic achievement, comparing to non procrastinating students. It was concluded that procrastinator are deluding themselves thinking procrastination has little impact on academic achievements (Seo, 2011).

The research concerning procrastination still maintain the dispute about reasons and motives of procrastination and about its positive or negative effects on academic performance. The goal of this study is to explore burnout in students and find the relationship between such phenomena as burnout and student's procrastination in the framework of study and its possible influence on student's academic success or academic failure. This study is unique, because it tries to investigate procrastination in students from different prospective, by relating it to burnout rather than self-handicapping and poor self regulation. Thus, the phenomenon of burnout was not considered together with the phenomenon of procrastination; however the flow of possible relationship is very sufficient. It is supposed that burnout might be highly correlated with procrastination and influence on student's productivity which in turn, will affect academic success.

The investigation of the burnout usually implies that researchers try to invent a method to increase productivity and person's efficacy. It means that this research might help to the methods of increasing student's productivity in academic frameworks. The investigation of burnout in relation to procrastination and its possible influence on academic success can contribute to the development process of academic courses in general and to the strategy of assigning tasks, especially writing assignments. And if it is possible to take burnout as starting point and we can prove its correlation with procrastination we can find the solution how to fight with this on the initial level of a person experiencing this phenomena and from the system in the face of the curriculum, syllabus and the tactic of teaching). As well, it is possible to prevent the presence of academic burnout in advance by means of improvement in curriculum of the course. Understanding phenomenon of procrastination will help us to understand its role in academic frameworks. The issue whether procrastination helps or distracts is still disputable. And one of the objective measures of procrastination's impact is academic success or failure. Therefore this research should contribute to education psychology field because has clear conceptual framework and might help in innovations development and improvements of educational climate.

Referring to what have been said before, the research question is whether academic burnout is related to academic procrastination and how these two variables influence on academic success. Therefore there are several hypotheses:

1) It is hypothesized that Academic Burnout is highly correlated with Academic procrastination.

2) It is assumed that students with higher GPA will tend to have higher burnout scores.

3) Students with higher GPA will tend to have lower burnout scores.

4) Academic procrastination influences on academic success in a positive way.

5) Academic procrastination influences on academic success in negative way.

Method

Participants

The participants were students taken from the American University of Central Asia. Total number of participants equals to 60 people. There were 30 females and 30 males among them. For the study the student's age, program, ethnicity were not important. The criterion for sampling was the year of study of the student. Only juniors and seniors were selected. The decision to create a sample consisting of only juniors and seniors is related to the idea that students should gain enough of academic experience. Participants should be already adjusted to the rules of the university, its requirements, difficult major program courses and atmosphere. Convenient sampling was used. The researcher took into consideration the fact that not a single program should dominate in terms of the number of participants; therefore the sample covers all the programs in roughly equal proportions.

Materials

In this study several questionnaires were used. Two of them are standardized inventories and one developed by the researcher under the senior thesis advisor supervision.

First inventory is called Shirom-Melamed Burnout Measure. This questionnaire was developed by researchers Shirom and Melamed (2006), who dedicated more than 10 years to burnout investigation. Revised 18 items scale met modern standards of measurement and is helpful in clinical settings (Lundgren-Nilsson, Jonsdottir et al., 2012). In this particular research the 14 items scale for non clinical settings was used. Second inventory is Tukman's

scale (1991) for measuring procrastination which contains 19 questions. Originally Tukman's scale consisted of 35 items with Cronbach alpha reliability coefficient of .90 (Tuckman, 1991). For the purposes of this study a short version was used. It consisted of 19 best suitable questions. These questions formed reliability of .86 (Tuckman, 1991). This questionnaire was validated on the population of students and is perfectly acceptable for academic procrastination measurement.

The third original inventory in Russian language, developed by the researcher under the supervision of academic adviser, and it is intended to measure the perception of student's procrastinating experience in relation to academic success. Basically, this questionnaire gives us an opportunity to understand how the late start of assignments influences the grades of the assignments. of this assignment, based on personal experience. In addition, it gives us a thought, if students procrastinate because, at the end they still get good results for the submitted assignment. This questionnaire helps to verify the third hypothesis and to understand how to view procrastination – as irresponsibility or a necessity. This questionnaire consists of 10 questions and reliability analysis has shown that Cronbach α coefficient is equal to 0,827, which shows sufficient internal consistency within questionnaire. All three questionnaires are Likert scale based inventories from completely disagree to completely agree (see appendix). In addition to three questionnaires the informed consent form was attached. It contained the purpose of the study, researcher's contact information and guaranteed freedom of participation.

In this research correlation and regression analysis were used. Correlation was used to investigate general relationships between all the variables and regression analysis was intended to research statistically significant relationships. In addition, descriptive statistics included and independent sample T test was used to analyze any the gender differences.

Design

In this study there are three main variables: burnout, procrastination, personal experience and GPA. In order to see how they are related it is necessarily to define predictor and response variables among them. Therefore it is assumed that burnout is predictor variable and procrastination is response variable in a relationship between burnout and procrastination. In turn, in a relationship between procrastination and personal experience, procrastination is independent variable and personal experience is a dependent one. In addition there are two more independent variables which help to find possible special features in relationships between burnout and procrastination – gender differences and academic success.

Procedure

Students, who participated in this research, were given a four page questionnaire with informed consent included. Besides the informed consent each participant was informed about anonymity (they didn't have to indicate their names) and explained about full voluntariness of participation verbally. Each participant was instructed how to fill out the questionnaires properly. On the page of informed consent they had to indicate their gender and Current GPA and Overall GPA. It was not necessarily to gather whole sample asking to fill out the questionnaire at the same time. So the participants had free choice in terms of time dedicated to questionnaires. But, on the average, time needed for completion of all questionnaires was approximately 10 minutes.

Results

There were 60 valid completed questionnaires. In general, descriptive statistics showed that the sample is relatively homogeneous concerning academic success. Thus, mean

for overall GPA is 3.33 with std. deviation 0.35. For current GPA mean is equal to 3.4 and std. deviation 0.34. In terms of other variables dispersive results were received. Thus, burnout variable with mean equal to 47.33 has std. deviation 15.08. Procrastination variable has 47.36 mean and std. deviation 6.25. Personal experience has mean of 25.1 and std. deviation 6.33.

General correlation analysis between variable Current GPA, which represents academic success, has shown negative and insignificant relationship with the variable of burnout and procrastination variable. Thus, Pearson's R in current GPA and burnout correlation is equal to -0.210. The relationship is weak, and what is more important the sig. level is $p<0.01$. And Pearson's R in current GPA and procrastination correlation is negative and insignificant and equals to – 0.007. In this relationship sig. level is also less than 90%.

Table 1

Correlation between Burnout and Current GPA, Procrastination and Current GPA

Variable	GPA (Pearson's R)	Sig. level
Burnout	-.210	.107
Procrastination	-.007	.957

In order to check assumed hypothesis students' GPA scores were divided into two groups – higher or equal to 3.3 and lower than 3.3. Than correlation analysis was conducted to see how burnout was reflected among these two groups. Output did not show statistically significant result, however the tendency was observed.

Table 2

Correlation between Burnout and GPA groups

Variable	Burnout (Pearson's R)	Sig. level
GPA < 3.3 (N of cases 21)	.311	.170
GPA ≥ 3.3 (N of cases 39)	-.242	.137

From the table it is observable that students who have GPA < 3.3 tend to have more burnout than students with GPA higher than 3.3. But in general, there was not significant correlation found and we can see that burnout and procrastination do not determine academic performance. This means that that our hypothesis about burnout's influence on GPA was not supported.

The results received have shown that there are statistically significant relationships between other variables. Thus, burnout and procrastination are significantly related. Using regression analysis regression equations were designed. The regression analysis has shown that coefficient of Person's r is equal to 0.403 between the burnout and procrastination variables. This describes that the relationship between these two variables is moderate. According to regression data, the regression equation is following: $y = 0.167 x + 39.463$, meaning that for each increase in the variable of burnout there will be an increase in the variable of procrastination on 39.463. Sig. < 5%, which means we didn't receive our results by chance. At this point our first hypothesis which suggested the relationship between burnout and procrastination was supported.

Table 3

Regression Analysis of Burnout and Procrastination

Variable	Pearson's R	Constant	B coefficient	Sig.
Burnout	.403	39.463	0.167.	.001

a. Dependent Variable: Procrastination

The burnout questionnaire gave us an opportunity to consider more precisely the subscales of burnout variable in relation to procrastination. Thus, we can find which scale influences on procrastination in the strongest way. An interesting tendency was found. Out of three subscales – cognitive, physical and emotional burnout only cognitive and physical burnout

are statistically significantly related to procrastination. Emotional subscale is not significantly related to procrastination; sig. level is less than 90%.

Table 4

Correlations between burnout subscales and procrastination

Variable	Physical burnout	Cognitive burnout	Emotional burnout
Procrastination	0.342	0.460	0.146
Sig. level	0.008	0.000	0.267

Another hypothesis which assumes procrastination might influence on academic success was also supported. Another regression analysis has shown that coefficient of Person's r is equal to 0.411 between procrastination and personal experience variables. This means that the relationship between these two variables is also strong. According to regression chart data, the regression equation is following: $y = 0.390x + 4.157$, meaning that for each increase in the variable of procrastination there will be an increase in the variable of personal experience on 4.157. Sig. level is less than 5% and equals to 0.001.

Table 5

Regression Analysis between Procrastination and Personal Experience

Variable	Pearson's R	Constant	B coefficient	Sig.
Procrastination	.438	4.068	0.444	.000

a. Dependent Variable: Experience

It was also possible to consider regression between procrastination and personal experience variables in a more precise way, selecting cases with GPA > 3.3 which can be considered as relatively high academic performance, and cases with GPA ≤ 3.3. This regression gives us a chance to consider closely how students with higher GPA perceive their procrastination in relation to academic success separately from those who have lower GPA. The following table shows that students with GPA ≤ 3.3 have stronger relationship between procrastination

and positive experience of procrastination in relation to academic success rather than students with GPA.

Table 5

Regression between Procrastination and Personal Experience

Variable	Pearson's R	Constant	B coefficient	Sig.
Procrastination (GPA > 3.3)	.318	9.672	.323	.059
Procrastination (GPA ≤ 3.3)	.546	-1.582	.562	.006

Note. Dependent Variable: Personal experience.

Regression equations for the case where GPA > 3.3 is: $y = 0.323x+9.672$. Meaning that with every increase in a variable procrastination, there will be an increase in the variable personal experience on 9.672 among students with Higher GPA. The Equation for the case where GPA ≤ 3.3 is next: $y = 0.562x – 1.582$. Meaning that with every increase in a variable procrastination there will be a decrease in the variable personal experience on 1.582.

There are several additional findings. Burnout questionnaire consisted of three scales: physical, cognitive and emotional, so it was possible to investigate which particular scale influenced procrastination variable more. Apparently Pearson's between cognitive burnout and procrastination is equal to 0.460. Correlation between physical burnout and procrastination is equal to 0.342 and between emotional burnout and procrastination equals to 0.146. This means that the cognitive burnout influences procrastination much more than other burnout types.

In order to see which type of burnout is more developed in students standardization of subscales was conducted. All the scores were converted into T scores and compared in means. In this context only gender differences were found. Apparently statistically significant

difference was found in emotional burnout scale. Females experience less emotional burnout comparing to males.

Table 5

Gender Differences in Burnout scales

Gender		Cognitive	Physical	Emotional
Male	mean	48.9154	50.3641	52.5333
	Std.dev	9.62764	8.72845	10.77588
Female	mean	51.1045	49.8000	47.4000
	Std.dev	10.62926	11.35109	8.56859
	Sig.	.407	.830	.046

Independent Sample t-test has shown that there is no statistically significant gender difference in means for burnout, procrastination and personal experience scores.

Table 4

Gender Difference in Burnout, Procrastination and Personal Experience

Gender		Burnout	Procrastination	Experience
Male	mean	48.0667	46.7333	35.1333
	Std.dev	14.22706	6.45907	6.24969
Female	mean	46.6000	48.0000	35.6167
	Std.dev	16.10654	6.08560	6.39410

Note. Significance level in all cases is < 90%.

It is possible to consider in details how personal experience might shape opinion about procrastination. If we take question #2, #3 and #7 from personal experience questionnaire we received that 58.3% in question #2, 58.3% in question #3 and 56.7 % in question # 7 reported

they had successful experience procrastinating, they believe procrastination doesn't influence future grade and sometimes is helpful in assignment completing.

In procrastination questionnaire, answers on questions #16 have shown that 58.3 % of students wished they could find a way to start assignments in time.

Discussion

In general, the results have supported several hypotheses. The research showed that academic burnout is presented in junior and senior students and there is significant relationship between burnout and procrastination. It means that students who have burnout tend to develop procrastination. Therefore our hypothesis about the relationship between these two variables was supported and we can develop this idea into further research, because these two phenomena were never investigated together before and there is an empty field in this area of study. We can assume that juniors and seniors are experienced in studying at the university and they are dealing with advanced 300 and 400 level courses. Therefore, they got used to the system, difficult curriculum and tend to experience burnout. In addition, the third and the fourth years of study can be described as difficult period, students might get disappointed about the major they study, they might get stressed about their future career, there might be a portion of uncertainty after graduation. Similar idea was presented by several researchers concerning not students, but employees. As cited in Cordes & Daugherty: "expectations about the profession, the organization, and their own personal efficacy also make a significant contribution to burnout and represent a source of "demands" placed upon themselves in their work" (Cordes & Daugherty, 1993, p. 636). As well, AUCA's curriculum is quite demanding, students are overloaded by home assignments. It can influence on feeling of cognitive strain. As in sample were juniors and seniors they might have part time jobs, other activities related to career planning. Also constant tension because of deadlines of

different sort of assignments: presentations, reflection papers, media projects, senior thesis might affect student's perception of successful task accomplishment in time, thus, making them emotionally and physically drained. Moreover, because of overload of assignments and other additional reasons, students might suffer from not getting enough of sleep. This also might have great contribution to physical and especially cognitive burnout. "Individuals experiencing qualitative overload feel they lack the basic skills or talents necessary to complete the task effectively. Quantitative overload refers to the individual's perception that the work cannot be done in the allotted time" (as cited in Cordes & Daugherty, p.631). And actually one of our research findings was the fact that among three scales of burnout the most developed were cognitive and physical scales rather than emotional scale. It actually means that much greater problem about academic burnout is rooted in cognitive weariness and physical burden. The thing is that correlation between procrastination was stronger in relationship with cognitive burnout and physical burnout. This statistical finding contributes to the idea that students experience burnout because of cognitive weariness (by means of overload of assignments) and physical burnout (e.g. lack of sleep). On this basis, procrastination of academic assignments seems to be one of possible scenarios of coping with such a situation. Students delay required assignments, trying to cope with their feelings of exhaustion; they might entertain themselves with any other pleasant activity in order to decrease depressed mood. In this case procrastination is not a failure in time management, not laziness, but coping strategy.

Another hypothesis about the relationship between academic burnout and procrastination and academic success was not supported. There were no significant relationships found between academic performance, burnout and procrastination. What is interesting that from the first sight burnout, absence of desire to study, postponing assignments should have an effect on academic success, particularly current GPA, and moreover it should have negative impact.

However, this research shows that there is no significant relationship, and the existing relationship is even negative. Our analysis with grouping students on the basis of their GPA has shown a very interesting tendency. Those students how have lower GPA have higher burnout. And those students who have higher GPA have lower burnout. These results have no statistically significant basis but the tendency was clear enough especially considering the size of the sample. Maybe the reason for this tendency is rooted in cultural mentality. In post-Soviet society students who have low grades are informally classified as "losers", have less respect from surrounding people. Therefore for those students who have lower GPA – burnout might be a reflection on difficult assignments. They might stigmatize themselves, thinking how much effort they should invest to get significantly successful result. The final component of burnout, diminished personal accomplishment, is characterized by a tendency to evaluate oneself negatively. Individuals experience a decline in feelings of job competence and successful achievement in their work or interactions with people. Frequently there is the perception of a lack of progress or even lost ground (Cordes & Daugherty, p.623). In contrast students with GPA higher than 3.3 can be better motivated by grades and therefore, study well. In addition, we should bear in mind that there might be students who are achievement oriented learners – they focus only on surface education, looking for a good grade. Such students may not know the subject deeply having high GPA though. And there are also might be intrinsic learners, who strive for deep knowledge that sometimes lies beyond the curriculum and syllabus, therefore this kind of knowledge is not evaluated and students have lower GPA. The subject of academic burnout should be an issue to discuss on the same level as job burnout. There should be enough attention paid to the student population, because in couple of years these people are going to work. We can't be sure about their productivity at work; about the extent of potential contribution they could have made experiencing burnout. In addition, maybe students experience burnout because they feel they are not able express

themselves in study because of too strict requirements: certain amount of pages, certain structure of arguments, certain resources usage, and certain topics. In other words, strict requirements might stigmatize student's creativity and self expression through assignments rather than maintain sort of objectivity and assessment in evaluating process. Not all professors encourage new approaches sometimes suppressing new prospective without giving clear argument why the approach is not appropriate. These all factors might contribute to student's feeling of non involvement into studying process and that's why students may not affiliate themselves to studying process. Similar idea was described at the beginning, and was proposed by Neumann et al. in 1990. The group of researchers found out significant dependence between student's involvement into study and burnout. Our research emphasizes importance of investigation of the burnout issue and gives an idea in what way to turn the flow of higher education with maintaining system and at the same time decreasing burnout among students.

But why procrastination and academic performance were not related? Here our variable personal experience may help. One of possible reasons procrastination doesn't affect academic performance is because procrastination might actually help to cope with assignments. The less time left for completing an assignment might influence on the level of adrenaline, excitement and anxiety. That's why procrastination doesn't influence academic failure. Moreover, variable personal experience tells that larger part of students reported that amount of time they spend on assignment accomplishment doesn't influence on the grade they receive. Therefore several questions from personal experience questionnaire showed that if student have positive experience with procrastination (had satisfactory grade) the more they tend to procrastinate. In this way we can't say that procrastination is a self regulatory failure as it was suggested by Bandura. We can assume that in students whose GPA was not affected by procrastination it appears to be a way to study, maybe the most productive and successful

way. Such students might need to experience the release of adrenalin; they are more concentrated and focused on the goal. As cited in Seo: "researchers have suggested that procrastination among successful college students may have little impact on performance because it allows them to achieve a sustained level of flow" (Seo, 2011, p.210). Flow in here means stable and adaptive way of studying. This category of students might postpone starting assignment, thinking about them, nurturing ideas and finishing an assignment at once in short period of time, realizing in advance that they are capable to accomplish them. And the variable personal experience tells that this procrastinating tendency was reinforced by good grade given by professor. On the other hand, those students whose GPA was affected due to procrastinating behavior are not able to evaluate the situation properly, as procrastination is not effective for studying in their case this phenomenon might be considered as self-regulatory failure. And our regression equations among two groups of students with GPA >3.3 and GPA $\leq$ 3.3 in relation to personal experience actually shows interesting tendency. Students with higher GPA have more positive experience procrastinating, contrast to students who have lower GPA. However we should note that Pearson's R shows not that strong relationship which is equal to .318. It means that maybe not all student with higher GPA procrastinate but still believe that late start of assignment shouldn't affect the grade if you know what to do and how to do this assignment. Or there is a possibility that students procrastinate but believe that late start of assignment actually somehow influences on academic success. In contrast, students with lower GPA have stronger and statistically significant correlation. Pearson's r is much higher, that is equal to .546. This might be explained that these students by procrastination believe that their GPA is affected in negative way, which is quite possible to be truth, because their GPA is lower indeed. This regression explained us that there is no definite, unambiguous answer about negative or positive effect of procrastination, but gave us quite clear scenario of procrastination, students' beliefs about

their procrastination and academic success. On the basis of this analysis we might consider two types of students – students with higher GPA and positive procrastinating experience and students with lower GPA who have less positive experience procrastinating in relation to academic success. So the second type of students actually admit that their procrastination negatively influences on academic success, however still procrastinate. It means that we indeed can consider procrastination as a "flow" in students with high GPA, and self regulatory failure in students with lower GPA. But we can classify it only in case students strive for academic success and motivated to achieve higher results, and again, exclude cases with intrinsic learners who might not care about their academic achievements. This gives an opportunity to understand what can be a best strategy to organize an academic course, especially the one that requires writing assignments. This research might suggest to teachers and curriculum developers an approach for these two types of students. Maybe it is possible to offer to students who have procrastination as negative feature a split of task. For example to split a writing assignment on several raw drafts submission, including peer-review activity. This will help such students to maintain a certain schedule for the assignment and in addition will help to improve time management skills. There is still a possibility that students might be late within these small tasks, but they will monitor the progress of the process and shouldn't be late to the final deadline. At the same time we shouldn't forget that there is another type of students who procrastinate "with benefit". They need this time to think, to analyze, and to nurture ideas and an image of completed assignment in "passive" way. For them the assignment split might harm, because they can prefer to do an assignment at once, or at least with longitudinal goal, not the short term goal assignment. For them system with several drafts and peer review will not work out because it will interrupt the holistic approach towards assignment accomplishment. In this case, in order not to ruin the mainstream class organization, in order not to overburden professors with extra activity those students who

have self regulatory problems might visit academic resource centers which is usually attached to the university where peer tutors will help with any academic assignment for free. There, they can work on ideas development, organization without being graded. The only thing they will have to do – to come every week. This might directly contribute to the improvement of academic success of students with lower GPA, but striving to academic success In case there is no such a resource as in American University of Central Asia (AUCA) it is possible to arrange extra activity as peer review beyond class. What is important to note is that there were no statistically significant gender difference neither in burnout, procrastination or personal experience variables. It is interesting that these phenomena are equally distributed among males and females. Moreover, girls are usually pictured as more responsible, punctual and thorough students than boys. But in this research it is shown that girls not only tend to procrastinate in the same manner as boys but to have this trait as an adaptive mechanism. However Gender difference was found within burnout scale. There was found not big, but statistically significant difference in emotional burnout scale. Average female from the sample had lower emotional burnout than average male. This fact can be explained culturally. In Kyrgyzstan males are portrayed as people who don't share with emotional problems and issues because it is considered as complaining. And complaining is in turn associated with weakness what contradicts with culturally masculine view of male. Males also express emotions in not that open way as females are culturally allowed. Maybe because of this, males do not share a lot about emotional exhaustion with other people, even close friends but it doesn't spare them from this exhaustion. That's why males receive more scores on this scale. As for girls, they are culturally got used to emotional investment into other people, especially friends and family. They are culturally and actually socially more "free" to share and express their emotions which might significantly lightens emotional burnout. Our findings about student's perception of procrastination in relation to academic success showed

us that the majority of students report they are succeeding procrastinating, meaning they do not think that late start of assignment may influence However there might be cases when students believe they are succeeding but in reality they receive lower grades when start assignments late. At the same time, the major part of students would like to change their habit and start competing assignments in time. This is very contradicting on one hand, but on the other we shouldn't forget that procrastination, especially together with burnout is actually distressing. Even a student might know he/she is capable to handle with an assignment there is always a portion of uncertainty, especially at the beginning of procrastination when a student haven't started contemplating on the assignment neither actively (e.g. writing drafts) nor passively (e.g. generating ideas). This time pressure, overload by other assignments, recognition of other students' progress in assignment accomplishment and finally interest in social life can make student feel extremely stressed and nervous. However, maybe these particular features are responsible for successful task completion for this kind of student. This original research actually supports both sides of procrastination discourse. It shows that procrastination itself might be positive, it doesn't bring problems with academic success, it is rather a tool, and adaptive strategy of studying for some students. For other students it is not an adaptive way of studying because their might have problems in self regulation. So far the research contributes to better understanding of the concept of burnout in academic framework, academic procrastination and its influence on academic success. This knowledge might help in educational psychology, innovations in higher education and other fields related to psychology if education.

There are some limitations of the study and suggestion for further research. First of all we have to note that the notion of procrastination was narrowed because of the context of questionnaires. The questions are applicable to any kind of writing assignments with clear deadline and power point presentation assignments, rather than exam preparations or reading

assignment for lectures. This point is not a limitation itself, it makes our research more specific, but for further research it is possible to consider procrastination in a broader way. At this point maybe it would made sense if we take a sample of students who take the same course that requires written paper and presentation in class in order to receive purer results. For further research it is recommended to take one particular course e.g. philosophy where students are involved into different kind of learning activity. In addition as a criteria of academic success Great Point Average was taken. Students were asked to indicate GPA for the last semester and overall GPA. Intention was to make sure that there is a stable tendency of learning strategy. This helped us to exclude extreme cases, for instance, when current GPA is 3.7, but overall GPA is 2.9. So for further research it is recommended to keep this strategy. However, it is maybe even better to indicate not overall GPA, but GPA received for last three semesters. The reason it was not convenient to do in this research was the fact when students were barely able to recall their GPA for last semester and overall GPA. Also, there are recommendations for improvements of the questionnaires. For this study maybe it would make sense to create on original questionnaire or to simplify the one which was used. First of all the vocabulary of Tuckman's questionnaire was sometimes difficult, and participants had to be under control in order to fill out questionnaire in a right way. Second of all, there were questions that measured general procrastinating tendency besides academic procrastination. Such questions could be deleted in order not to confuse students. In addition several important questions could be added into personal experience questionnaire could be moved to procrastination questionnaire. Here are possible questions to add: "I procrastinate because I know I am able to complete assignment successfully", "I postpone work on assignment because I do not know how to complete it", "I delay start working on assignment because I do not understand it", and straight question "I think the fact of my procrastination influences your GPA. This question would clarify student's perception about procrastination and

elucidate the motives of procrastinating behavior. For further research it is also recommended to conduct a longitudinal study. To take one course which might be taught in several groups in order to have larger sample, but have the same curriculum. It will help to monitor better student's opinion about procrastination and their academic success right away, and observe who out of them has self regulatory failure and who succeeds procrastinating. There is one main limitation and future suggestion. One of them is a size for the sample. For more precise picture it would be better to take a sample of at least 100 students, it would make possible to generalize our findings on population of senior students of AUCA. For further research it also makes sense to take students with various GPA. In this study average GPA was 3.4 which is already relatively high, so in our sample the majority were "good" students and "excellent" students. It is going to be clearer research if there will be significant difference in GPA. In this research it appeared not to be possible to conduct this procedure, because of convenient method of sampling and above average academic achievement in general. On hand it was possible to set higher threshold for academic success grouping. Instead of grouping students with GPA >3.3 and students with GPA ≤3.3 we could group students with GPA >3.6 and students with GPA ≤3.3, but this result wouldn't present us statistically significant results, due to the size of sample.

In general, objectives of the study were accomplished in following way: it was showed that burnout and procrastination are significantly correlated. Our assumption about relationship of burnout and academic success was not supported by statistics. There was found only a tendency describing that students with higher GPA tend to have lower burnout scores. The analysis of procrastination and academic success didn't show direct relationship and effect on academic success, but described a tendency where procrastination might influence on academic success both in positive and negative ways. All these findings and ideas, hopefully will contribute to other research in appropriate field of study.

References:

Aypay A. (2011). Elementary school student burnout scale for grades 6-8: A study of validity and reliability. *Educational Sciences: Theory & Practice*, 11, 2, 520-527. Retrieved from Ebsco database.

Bandura A. (1996). Failures in self-regulation: Energy depletion or Selective disengagement? *Psychological Inquiry*, 7, 1, 20-24. Retrieved from JSTOR database.

Bandura A. (1999). A sociocognitive analysis of substance abuse: an agentic perspective. *Psychological Science, 10,3,* 214-217. Retrieved from JSTOR. Database

Bandura A., Zimmerman B., Martinez-Pons M. (1993). Self-motivation for academic attainment: the role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, 29, 3, 663-676. Retrieved from JSTOR database.

Chu A., & Choi J.N. (2005). Rethinking Procrastination: Positive Effects of "Active" Procrastination Behavior on Attitudes and Performance. *Journal Of Social Psychology*, 145, 3, 245-264. Retrieved from Ebsco database.

Cordes C. L., Dougherty T. W. (1993). A review and integration of research on job burnout. *Academy Of Management Review*, 18, 4, 621-656. doi:10.5465/AMR.1993.9402210153

Dahlin M., Joneborg N., Runeson B. (2007).Performance-based self-esteem and burnout in a cross-sectional study of medical students, *Medical Teacher,*29, 43-48. Retrieved from JSTOR database.

Deniz E., Tras Z., Aydogan D. (2009*).* An investigation of academic procrastination, locus of control, and emotional intelligence. *Educational Sciences: Theory &Practice,9,2,623-632.* Retrieved from Ebsco database.

Gan Y., Shang J., Zhang Y. (2007). Coping Flexibility and Locus of Control as Predictors of Burnout among Chinese College Students. *Social Behavior& Personality: An International Journal*,35,8, 1087-1098. Retrieved from Ebsco database.

Jennings M. (2009). Medical student burnout: Interdisciplinary exploration and analysis. *Jounal of Medical Humanities*, 30, 253-259. Retrieved from JSTOR database.

Koeske G., Koeske R. (1991). Student "Burnout" as a Mediator of the Stress-Outcome Relationship. *Research in Higher Education*, 4, 32, 415-431. Retrieved from JSTOR database.

Law D., Koeske R., Koeske G. (2010). A measure of burnout for business students, *Journal of Education for Business*, 85, 195–202. Retrieved from Ebsco database.

Lundgren-Nilsson A., Jonsdottir I., Pallant J., & Ahlborg A.(2012) Internal construct validity of the Shirom-Melamed Burnout Questionnaire (SMBQ). *BMC Public Health*, 12, 1, 1-8. Retrieved from Ebsco database.

Melamed S., Shirom A., Toker S., Berliner S., & Shapira I. (2006). Burnout and Risk of Cardiovascular Disease: Evidence, Possible Causal Paths, and Promising Research Directions. *Psychological Bulletin*, 132, 3, 327-353. Retrieved from Ebsco database.

Morgan B., De Bruin K. (2010). The relationship between the big five personality traits and burnout in South African university students. *South African Journal of Psychology*, 40, 2, 182-191. Retrieved from Ebsco database.

Neumann Y., Finaly-Neumann E., Reichel A. (2010). Determinants and Consequences of Students' Burnout in Universities. *The Journal of Higher Education*, 61, 2, 20-31. Retrieved from JSTOR database.

Pisarik C. (2009). Motivational orientation and burnout among undergraduate college students, *College Student Journal,* 43, 4, 1238-1252. Retrieved from Ebsco database.

Seo, E.U. (2011). The relationships among procrastination, flow, and academic achievement. *Social behavior and personality*, 39, 2, 209-218. Retrieved from Ebsco database.

Sharma M, P. (1997). Task procrastination and its determinants. *Indian Journal of Industrial Relations,* 33, 1, 17-33. Retrieved from JSTOR database.

Tuckman B. (2002). The Relationship of Academic Procrastination, Rationalizations, and Performance in a Web Course with Deadlines. Retrieved from http://dennislearningcenter.osu.edu/references/academic_procrastinators.htm

Yoneyama S. (2000). *British Journal of Sociology of Education*, 1, 21, 77-94. Retrieved from JSTOR database.

Yong F.L. (2010). A study on the assertiveness and academic procrastination of English and communication students at a private university. *American Journal of Scientific Research, 9, 62-72.* Retrieved from Ebsco database.

Table 1

Correlation between burnout and GPA groups

Burnout Variable	N of cases	Mean	Std. Dev.	Pearson's R	Sig. level
Group 1 (GPA <3.3)	21	52.0952	17.89387	.311	.170
Group 2 (GPA ≥3.3)	39	44.7692	12.86460	-.242	.137

Table 2

Regression Analysis of Burnout and Procrastination

Variable	R	R square	Std. Error of the Estimate	Constant	B coefficient	Sig.
Burnout	.403	.162	5.77395	39.463	.167	.001

a. Dependent Variable: Procrastination

Table 3

Regression Analysis of Procrastination and Personal Experience

Variable	R	R square	Std. Error of the Estimate	Constant	B coefficient	Sig.
Burnout	.438	.192	5.74809	4.068	.444	.000

a. Dependent Variable: Personal Experience

Table 4

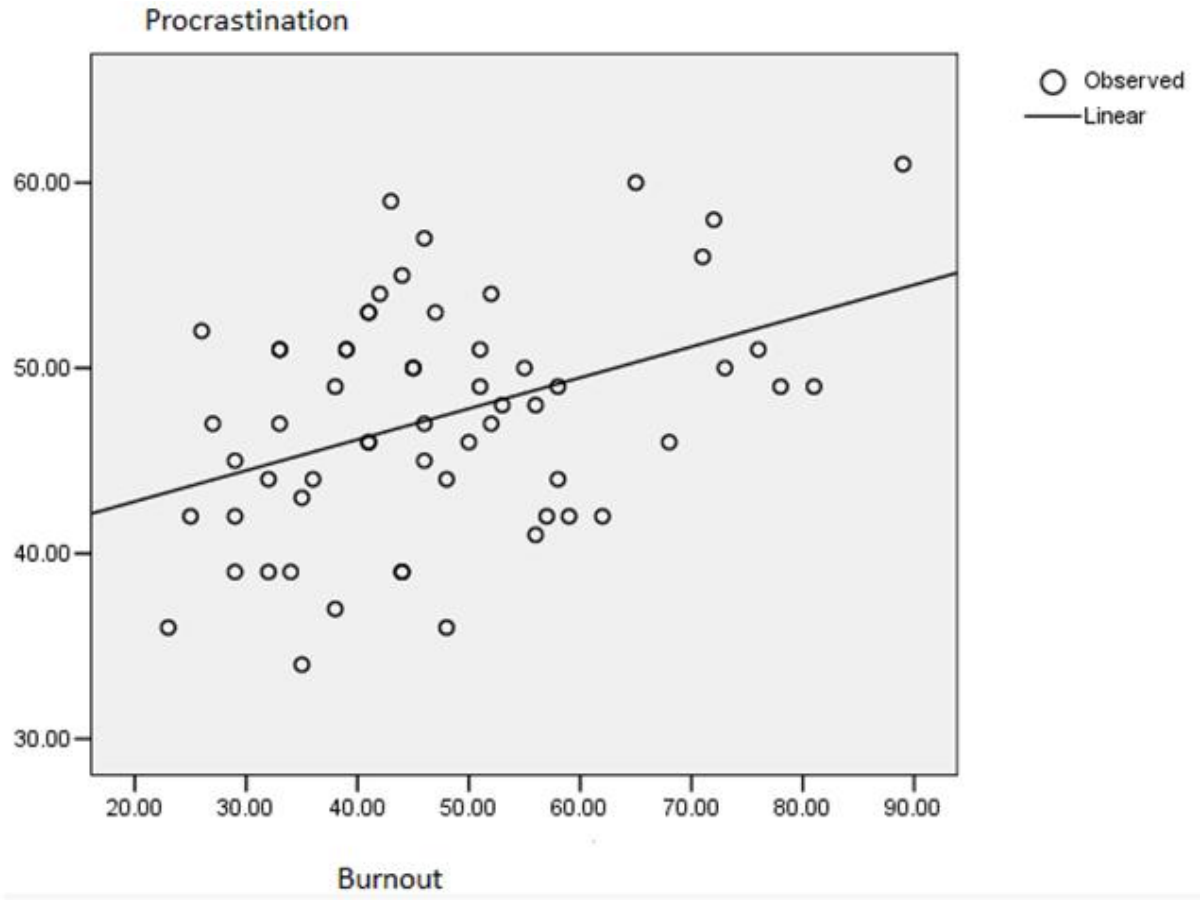
Regression between Procrastination and Personal Experience with GPA Grouping

Variable	R	R square	Std. Error of the Estimate	Constant	B coefficient	Sig.
GPA >3.3	.318	.101	6.18651	.323	9.672	.059
GPA ≤ 3.3	.546	.298	5.53592	.562	-1.582	.006

Note. Dependent Variable: personal experience. N of cases GPA >3.3 = 36, N of cases GPA ≤3.3 = 24

Figures

Scatter plot with regression line on burnout and procrastination regression analysis.

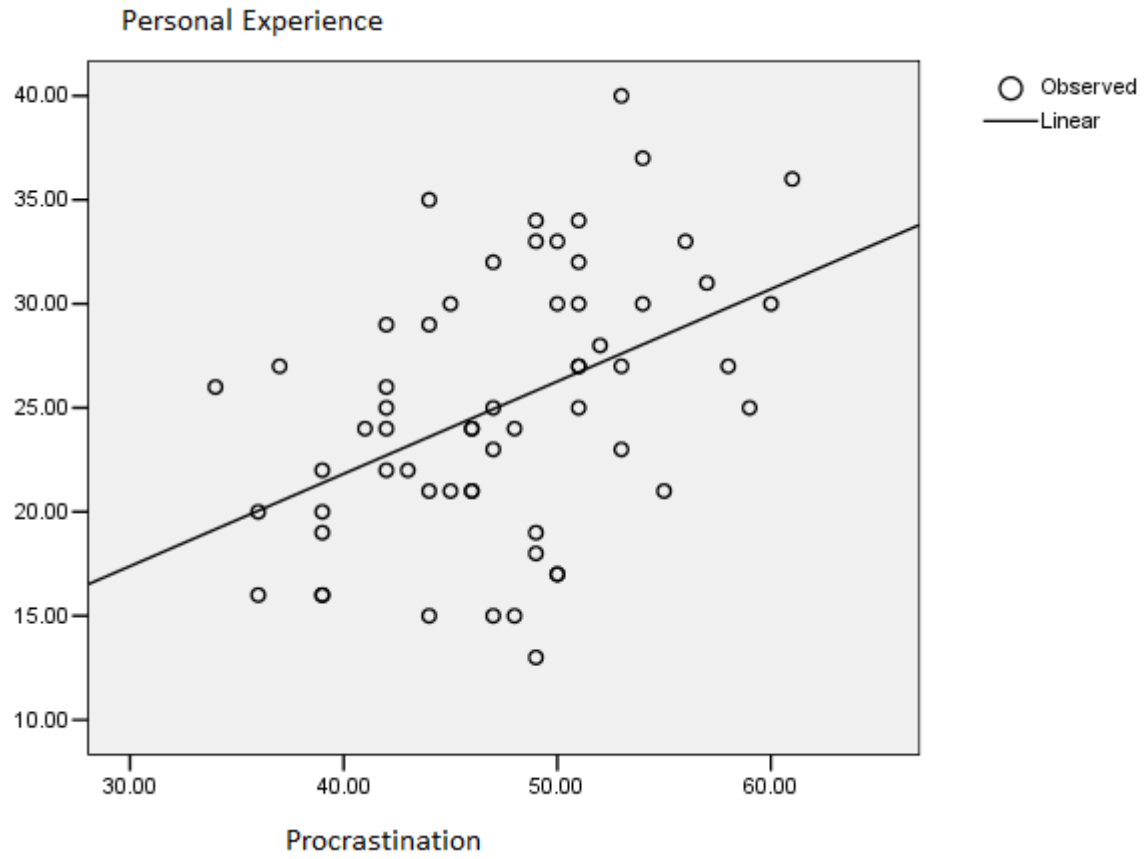


Note. Dependent variable: Procrastination

Regression equation: $y = 0.167 x + 39.463$

Figure 2

Scatter plot with regression line on procrastination and personal experience analysis.



Note. Dependent variable: Personal experience

Regression equation: y = 0.562x – 1.582

Appendix A

Informed Consent form

Dear participant!

I am asking your voluntary participation in my research project.

Please read the following information about the research.

If you would like to participate, please sign in the appropriate box below.

Purpose of the research: researcher is interested in the phenomenon of student burnout and procrastination.

If you participate, you will be asked to fill out a questionnaire

Time required for participation: approximate time needed for filling out the form is 10 minutes.

There are no potential risks of this study. Your confidentiality is guaranteed. No names needed.

If you have any questions about this study, feel free to contact: 0550 628339 - Firuza

Researcher signature_____

Participant signature _____

Before you start, please indicate:

Gender □ male

□ female

Current GPA _____

Overall GPA _____

Appendix B

Shirom-Melamed Burnout Questionnaire

	How often have you felt this way at school?						
	Never or almost never	Very infrequently	Quite infrequently	Sometimes	Quite frequently	Very frequently	Always or almost always
1. I feel tired	1	2	3	4	5	6	7
2. I have no energy for going to school in the morning	1	2	3	4	5	6	7
3. I feel physically drained	1	2	3	4	5	6	7
4. I feel fed up	1	2	3	4	5	6	7
5. I feel like my “batteries” are “dead”	1	2	3	4	5	6	7
6. I feel burned out	1	2	3	4	5	6	7
7. My thinking process is slow	1	2	3	4	5	6	7
8. I have difficulty concentrating	1	2	3	4	5	6	7
9. I feel I'm not thinking clearly	1	2	3	4	5	6	7
10. I feel I'm not focused in my thinking	1	2	3	4	5	6	7
11. I have difficulty thinking about complex things	1	2	3	4	5	6	7

12. I feel I am unable to be sensitive to the needs of classmates and peers at school	1	2	3	4	5	6	7
13. I feel I am not capable of investing emotionally in classmates and peers at school	1	2	3	4	5	6	7
14. I feel I am not capable of being sympathetic to classmates and school peers	1	2	3	4	5	6	7

Appendix C

Please answer to the following questions:

1 – That's **not** me for sure

2 – That's **not** my tendency

3 – That's my tendency

4 – That's me for sure

I needlessly delay finishing school assignments even when they were important	1 2 3 4
I postpone starting in on things I don't like to do	1 2 3 4
When I have a deadline I wait till last minute	1 2 3 4
I delay making thought decisions	1 2 3 4
I keep putting off improving my work habits	1 2 3 4
I manage to find an excuse for not doing something	1 2 3 4
I avoid doing those things which I expect to do poorly	1 2 3 4
I put necessary time into even boring tasks, I like studying	1 2 3 4
When I get tired of unpleasant assignments I stop.	1 2 3 4
I am an incurable time waster	1 2 3 4
I am a time waster now but I am unable to do anything about it	1 2 3 4
I promise myself I will do something and then drag my feet (затягиваю)	1 2 3 4
Whenever I make a plan of action, I follow it	1 2 3 4
I always finish important assignments with time to spare (с запасом времени)	1 2 3 4

When I’m done with my work, I check it over	1 2 3 4
I wish I could find an easy way to get myself moving	1 2 3 4
I look for a shortcut to get through a task	1 2 3 4
I still get stuck in neutral even though I know how important it is to get started	1 2 3 4
Putting something off until tomorrow is not the way I do	1 2 3 4

Appendix D

Please answer the questions:

1= absolutely disagree 3 = rather agree

2 = rather disagree 4 = absolutely agree

It is difficult for me to start assignment 1 2 3 4

I think the grade doesn't depend on time you start assignment 1 2 3 4

It often happens to me when I start

assignment one night before the deadline I get high grade. 1 2 3 4

I work most productively when I think there is little time left 1 2 3 4

I work most productively one day or night before the deadline 1 2 3 4

Those works that I write smoothly, driven on by a deadline

are graded higher than those that I start beforehand 1 2 3 4

I think it is quite possible to receive good grade

when only one day is spent on preparation 1 2 3 4

When there is not much time left before the deadline

I experience high motivation which I need for productive work 1 2 3 4

I had cases when I started assignment after deadline,

knowing my professor will extract points 1 2 3 4

I feel excitement and spirit when I have to do an assignments several hours before the

deadline 1 2 3 4