Published online 2017 March 28.

**Research Article** 

# The Effectiveness of Positive Thinking Skills on Academic Procrastination of High School Female Students Kermanshah City

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Received 2017 February 01; Revised 2017 February 19; Accepted 2017 March 05.

### Abstract

**Introduction:** Positive psychology interventions with focus on strengths of individual, is one of the new approaches in helping people due to develop their ability and emits .the aim of this study was to determine the effectiveness of positive thinking skills on academic procrastination of high school female students.

**Methods:** Research type was semi-experimental, pretest-posttest design with control group. Population was all female high school students in 3 section education organization Kermanshah city, 2014-2015. The research sample included 120 female from 22 Bahman high school students who were selected through multistage random cluster sampling method and then based on entrance and existence criteria assigned into two groups (experimental and control) randomly. The instruments used were academic procrastination Scale (validity = 0.65 & reliability = 0.83). The positive thinking skills intervention included 8 sessions, each 90 minutes, twice in week for experimental group. Because of effectiveness these interventions sessions were applied for control groups after posttest. Data analyzed with analysis of covariance using spss-21.

**Results:** The results showed that positive thinking skills is effective on academic procrastination of high school female students ( $P \le 0.001$ ).

**Conclusions:** Regarding the divergences between two groups' positive skills training scan be effective in reducing procrastination. Findings indicated the necessity of applying positive thinking program training in schools due to reducing academic procrastination and increasing success and progress of their academic performance in students.

## 1. Background

There are some problems in student's lives that prevent them to overcome their academic responsibility. One of the problems that limit's the student's academic abilities is procrastination (1). Procrastination is not a new word. Historical studies show that procrastination at least three thousand years ago harmful to people's tragedy (2). Procrastination is equivalent to negligence, indifference, and decisional postponing (3). In fact, the definition of procrastination is when a person wants to perform an action that might have some results for him in the future but postpones it unreasonably (4). Procrastination is a pervasive and aversive behavior for most students, which always comes along with being uncomfortable as well as feeling of depression (5).

It is not only a timetable management problem but also a complicate process, which consists of emotional, cognitive, and behavioral components (6). Positive psychology perspective includes: academic procrastination (7), decisional procrastination (8), neurotic procrastination (9), and compulsive procrastination (10). However, the most common form is academic procrastination (5). Roth Bloom, Salomon, and Morcamey define this concept as the students' continual tendency to postpone academic tasks (1). Students who procrastinate postpone their readiness for the last night, thus, at the time of the examination, they experience sever disturbance of mind (11-13). Reasons for procrastination are unknown. Specialists specified different causes for procrastination, which are: fear of success, fear of defeat, self-hurting behaviors, avoiding things that the individual doesn't like to do and having no motive to do an action, making stress for doing things in the last seconds, work hard, as well as lacking knowledge/skill (14). Other factors include idealism, low tolerance level versus problems, and inferiority complex feelings, which are the main causes of procrastination (15). There are 2 kinds of behavior postponing among students: one of these is meaningful scheduled delay (16) and the other is unreasonable and damaging delay, which is known as academic procrastination (16). Many researches have reported procrastination with respect to negative emotions (17).

One of the psychological approaches, which has a positive sight on individuals is positive psychology perspective. Positive psychology is a term, which consists of posi-

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tive emotions study, positive personality characteristics, as well as a powerful organization as a family (18). Psychological phenomena such as happiness, optimism, hope, creativity, and wisdom, which are resulted from the mind positive experiences, are the main focuses of positive psychological studies (19). The aim of this psychology is to help individuals improve their skills and abilities (20). Investigations have shown that necessary skills (for possessing optimism and positive thinking along with flexibility and based on reality) can be taught to children and teenagers and can be prevented from many problems (21).

Seligman et al., in a research they carried out in American schools, found that thinking about possesses and riches increases hope level, life satisfaction, and joy in students (22).

In the case of the effectiveness of positive thinking skills training, inside and outside studies showed that training positive thinking skills have positive effects on improving depression (18), increasing happiness (23-25), self-competent and self-esteem (26), increasing hope (27, 28), mental health (29), increasing progression motivation (30) subjective well-being (26), optimal functioning (27), increasing compatibility (31), confronting methods (32, 33) decreasing addiction vulnerability (34), and more. In the Debra study, under "The Role of Mental Flexibility in Academic Procrastination", 2 kinds of students were selected and completed the questionnaire related to depression and mental flexibility attribute (35).

Wong, in his study, under "The Study of Positive Thinking Relationships Versus Negative Thinking With Mental Health and Mental Incompatibility in Singapore Students", showed that positive thinking had a positive correlation with mental health indicators (life and happiness satisfaction) and a negative correlation with mental incompatibility indicators (stress, anxiety, depression, and anger) (36).

The results showed that procrastination had a positive correlation with anxiety and a negative correlation with mental flexibility. It is necessary to have students with positive thinking about themselves, others, as well as life and are able to accede high school periods, the need for intervention, and training is felt very well. Regarding the effectiveness of positive thinking skills on different academic problems, the current study's purpose is to determine the effectiveness of positive thinking skills training on academic procrastination of high school students. Therefore, based on the above purpose, the following hypothesis is formed:

Positive training for thinking skills is effective on reducing academic procrastination of female students (getting ready for examination, home work, tasks as well as for final term articles).

The first step in every scientific effort is accurate and

a specified definition of given concepts. As many other constructs in psychology, there are different definitions and theories regarding procrastination, which will be described further in the study. In the Latin language, procrastination is composed of 2 parts: "pre", which means ahead/forward and "procrastination", which means tomorrow/postponing to another time. The cause of this phenomenon is unnecessary delaying or postponing (2). It is a big mistake to consider procrastination as an in action, due to the fact that in this state, the person has no tendency to do an action, which in procrastination, he frequently does S.th and may keep himself busy in order to avoid doing an action he should do (3). Wohl et al. discriminate 2 essential elements in the definition of procrastination: first, procrastination is a syndrome that results in several physical as well as mental damages for the person and second, the person avoids doing an action irrationally (35).

Ferrari divides the procrastination concept into 2 classes, behavioral and decisional procrastination. Behavioral procrastination points to the inconsiderate individuals who postpone their tasks in order to protect their selfesteem, while decisional procrastination implies those individual who postpone their decisions to prevent the conflicts. Behavioral procrastination has a correct and explicit correlation with academic achievement (37).

Procrastination has some signs which are: dawdle, merging in responsibility, feeling, being unable to achieve the important goals, doing the tasks fast in last minutes, utopianism, lacking a good program in life, and giving meaningless devices (38).

The study has shown that positive emotions facilitate the behavior method and activity continuation. In this study, the researchers found that positive emotions and experiences motivates the individuals to be involved in their environment (39).

One approach is a very useful and positive mental health treatment (40). In fact, positive thinking psychology is an approach that emphasizes the individuals' abilities and excellence and enables the individuals and communities to become successful (41). The purpose of these approaches is to recognize the constructs and methods that finally make the human life better. Therefore, the factors, which adjust people with stresses and life threats, are of the most fundamental constructs under investigation in positive thinking psychology (42).

#### 2. Methods

The current research type was semi-experimental with a 2 group pretest, post-tut design. The population was all female high-school student's (junior high-school student's) of Kermanshah city in 2015 - 2016. Due to the high population number and in order to investigate the data in this study, multistage random cluster sampling method was used. The research sample included 120 female students from 22 Bahman high school from 3 section of the education organization of Kermanshah city, then the academic procrastination questionnaire was administered among them. Some explanations regarding the questionnaire were presented to students before giving the questions to them. Therefore, based on entrance (being volunteer to incorporate in the study, and low scale in academic procrastination test) and existence criteria (failing background, simultaneous training, and therapy) assigned into 2 groups (experimental and control group). Positive thinking skills training was devoted to 1 group randomly and another group played the control group role. Then, academic procrastination were designed and administered. Before beginning the session, the executor, while creating a positive relationship with the participants and explaining about the roles of the work-shop, ensured them that this is a mutual relationship. Also, he announced that in this training workshop, participation is necessary. It was tried in the given design that the participants experience a different situation. Training each skill included 2 phases: The first phase is introducing and defining each of the skills and the second phase is implementing the practices related to the sessions and presenting clear examples to understand each of the skills. In all training sessions, using simple language in the training phase, emphasizing on group discussion, reporting the tasks, and replaying the questions was done. It should be noted that each session lasted for 90 minutes and was held twice a week. It was administered 1 week after the last post-test intervention of both groups. Furthermore, according to moral responsibilities, this training was carried out for the experimental group after post-test administration. Academic period content are as followed (Table 1):

The research tool included the academic procrastination scale. This scale was created by Solomon and Rothbloom in 1984 and has 27 items, which investigates 3 components (43). The first component is getting ready for examination, which has 8 items. The second is getting ready for homework, which includes 11 items and the third component is getting ready for their final-term articles, which has 8 items. In the third component, the questions related to the final-term articles were as class studies for the Iranian student's and this alternative was explained for the respondents to this scale. The responding method to this item is that the respondents show their agreement about each item by selecting one of the alternatives "sometimes" "most of time", and "always" that "seldom" gest/takes score 1, "sometimes": score 2, "most of time": score 3, and "always": score 4. Furthermore, in these scales items 2, 4, 6, 11, Table 1. Positive Thinking Skills Training Sessions Specifications

Sessions	
First	Participants introduce themselves to each other, confederacy therapy, training-therapy program process definition, explaining the group purposes and rules explaining about time, the number of sessions, defining positive and investigating the effects, its vantage and defect precisely to get the members ready for the next sessions, summarizing the given subjects
Second	positive thinking definition, discussing about positive thinking merits, requesting the members to specify optimistic and pessimistic individuals, determining positive thinking signs, describing explanation styles, summarizing the given subjects
Third	In traducing ABCDE model, explaining the main skills in optimism and providing some examples of each skill, summarizing the given subjects
Forth	Presenting the explanations of effective discussion and it's in dealing with negative belief and its examples describing the way of changing subjective pictures, summarizing the given subjects
Fifth	Describing: using supportive sentences, precise expression, avoiding using "should", summarizing the given subjects
Sixth	Training problem solving skills, describing: eliminating failure impression, focusing on successes, increasing self-confidence range, summarizing the given subjects
Seventh	Explaining about how control the angry, fundamental steps for self- expression, saying "No" and relationships methods, summarizing the given subjects, training satisfaction versus idealism, describing positive emotions and abilities training methods.
Eighth	Goal selection programming in moving towards the goals, keeping motivation, summarizing the given subjects, explaining about: A) creating a positive environment, B) positive thinking, C) doing sports and practices, appropriate sleep, Describing: A) achieving the goals, B) recognizing self-value C) controlling life events, collecting the sessions descriptions, determining post-test and following test administration.

15, 16, 21, 23, and 25, are scored reversely. The tests minimum scores is 1, which shows lack of procrastination and its maximum is 108, which shows the highest level of procrastination. In the study done by Solomon and Rothbloom, the final- scale academic negligence through inner similarity was conducte and Cronbach'sAlph coefficient of 64% was acquired. Furthermore, these researchers obtained validity of this scale by using inner correlation 84%. This questionnaire has been translated by Jowkar and Delavarpour (44) and its reliability and validity has been obtained 61% and 84%, respectively. The questions 7, 8, 18, 19, 20, and 27, were considered to evaluate 2 features (uncomfortable feeling towards/ about being negligent and having an interest to change negligence, which based on the scale creator's offer, these 6 questions are neglected in evaluating the validity and reliability. In Dehghan's study (quoted by Ali maddad) (45), the reliability of the test has been obtained 79% through Cronbach's Alpha method. In the current study, the reliability coefficient of Cronbach's Alpha for this questionnaire was 83%.

## 3. Results

Age position of the sample under investigation has been revealed in Table 2. The age range of the individuals taking the tests is from 14 to 15 years. The age range of the experimental group is 14.46 and control group 14.60. The total v of the testeem is 14.53 and also the standard deviation of them is 0.50 who were all studying in the first class of high school and there are no significant difference between experimental and control group.

As it was observed in the Table 3 the mean  $\pm$  standard deviation of Pre-test scores of the subscale "Getting Ready For Examination" in the experimental groups is 27.26  $\pm$ 3.67 and post-test 18.40  $\pm$  2.44, where as in the control group, pre-test is 27.40  $\pm$  3.50 and post-test 26.53  $\pm$  2.89. For the subscale "Getting Ready For Final-term Articles" in the experimental groups Pre-test is  $34.66 \pm 4.25$ , Posttest 23.93  $\pm$  2.21, where as in the control group, Pre-test is  $32.53 \pm 4.96$  and Post-test  $33.26 \pm 4.25$ . Finally, for the subscale "Getting Ready For Final-term Articles" in the experimental groups pre-test is 27.44  $\pm$  5.57 and post-test 17.20  $\pm$  3.29, where as in in the control group, pre-test is 25.66  $\pm$  5.05 and post-test is 27.26  $\pm$  4.14. Positive thinking skill straining is effective on reducing the female student's academic procrastination (getting ready for examination, getting ready for homework and getting ready for the finalterm articles).

According to Table 4 results, it can be said that there is a significant correlation between the experimental and control group in all academic procrastination subscales and it means that positive thinking skills is effective on reducing the student's academic. Procrastination regarding the square measure can be said that positive thinking skills training has been effective on all subscales getting ready for examination (0.77), getting ready for homework (0.70), and getting ready for final-term articles (0.74), however, this effect has been more on getting ready for examination than other subscales (0.84). Additionally, positive thinking skills training has a significant effect on the total score of academic procrastination (P < 0.001). On the other hand, the statistical potency (power) is one that implies enough sample volume.

# 4. Discussion and Conclusions

The current study was conducted in order to investigate the effectiveness of positive thinking skills training on reducing academic procrastination of female high school student's. The research findings for the first hypothesis showed that positive training for thinking skills has been effective on reducing academic procrastination. There is no a similar investigation that shows the effect of positive training for thinking skills procrastination to compare the obtained result, however, positive thinking is one of the important components in psychology progression. Therefore. The results of this study are in agreement with many research findings (23-31, 35, 36). The results showed that that positive training for thinking skills has been effective in increasing happiness (23-25). Mohammadi and Bani Adam showed it can be found that positive training for thinking skills have been effective in increasing selfcompetent and self-esteem (26). The results of this study revealed that positive training for thinking skills have been effective in increasing hoped (27, 28). Emmons and Mc-Cullough showed that positive training for thinking skills has been effective in increasing mental heath (29). The research of Rashid's study revealed that positive training for thinking skills have been effective in increasing progression motivation (30). Lee et al. showed that positive training for thinking skills have been effective in increasing subjective well-being (26). Alberto and Joyner showed that positive training for thinking skills have been effective in increasing optimal functioning (27).

Nazari revealed that positive training for thinking skills has been effective on the total adjustment and social and academic compatibility (31). In the Debra study, the results showed that procrastination had a positive correlation with anxiety and a negative correlation with mental flexibility (35). Finally, in a study done by Wong, it was shown that positive thinking has a positive correlation with mental health indicators (satisfaction of life and happiness) and a negative correlation with mental incompatibility (stress, anxiety, depression and angry). Conversely, negative thinking had a positive correlation with the incompatibility indicator (stress, anxiety, depression and angry) and a negative correlation with the mental indicator (satisfaction of life and happiness) (36).

In the investigation of the effect of positive training of thinking skills, it can be voted that positive thinking psychology techniques make the students' focus on their abilities and strengths instead of their weaknesses and defeats. In this study, the students' were helped through positive training of thinking techniques, especially the methods of improving the talents and abilities as well as increasing self-confidence range, which causes the students' to be able to accept their responsibilities and have a better image regarding their personality. Also, according to the protocol, the students' were taught to change their document styles, change their envisions, and have an ABCDE model where they recognize their cognitive mistakes and irrational thoughts and replace them with more positive beliefs. Seligman (21) has defined optimism as an investigating style. Based on his theory, optimistic individuals

Table 2. Research Sample Age Student's

Group	Sample	Minimum	Maximum	Mean $\pm$ SD
Experimental	15	14	15	$14.46\pm0.51$
Control	15	14	15	$14.60\pm0.50$
Total	30	14	15	$14.53 \pm 0.50$

Table 3. Academic Procrastination Mean and Standard Deviation in Experimental and Control  $\operatorname{Groups}^{\operatorname{a}}$ 

	Phase	Experimental Group	Control Group
Getting ready for	Pre-test	$27.26\pm3.67$	$27.40 \pm 3.50$
examination	Poste-test	$18.40 \pm 2.44$	$26.53 \pm 2.89$
Getting ready for	Pre-test	$34.66 \pm 4.65$	$32.53 \pm 4.96$
homework	Poste-test	$23.93 \pm 2.21$	$32.26 \pm 4.25$
Getting ready for	Pre-test	$27.40\pm5.57$	$25.66\pm5.05$
final-term articles	Poste-test	$17.20\pm3.29$	$27.26 \pm 4.14$
Academic	Pre-test	$89.33 \pm 11.39$	$85.60\pm9.56$
procrastination	Poste-test	$59.53 \pm 6.51$	$87.06 \pm 8.90$

<sup>a</sup>Values are expressed as mean  $\pm$  SD.

specify the negative events attributing their reason to external factors. He knows optimism as a tool that helps individuals obtain their purposes. Therefore, it seems that positive training of thinking skills as well as emphasizing on positive abilities and characteristics, caused the students' to recognize their talents and have some kind of satisfaction as well as use this talent in achieving their purposes, and as a result, reduce their procrastination.

The research finding revealed that positive training for thinking skills has been effective on all academic procrastination of female students' subscales (getting ready for examination, and getting ready for tasks, getting ready for final-term articles) in the studying of the effectiveness of positive training for thinking skills and getting ready for an examination. It can be claimed that students' we thought in this training to determine the main, accessible, and measurable purposes, as well as specify the way to goal encourage themselves after each step. Therefore, having a good and trying to achieve it puts the individual in the right path and leads them to being self-regulated, which can guide the students' to get ready for their examinations and therefore, reduces their procrastination. Furthermore, in the study of the effectiveness of positive training for thinking skills and on getting ready for tasks and homework in female students', it can be referenced to Pintrich and De Groath [1990] who said "the task importance is of the motivation variables". It seems that individuals who have intrinsic motivation try their test to gain their purposes regardless the external factors roles and involve actively in the problems, and they have a high level of motivation to face the problems and solve them. Another concept, which can come to this conclusion, is the "homework aversion" concept. It can be pointed out from investigating the findings of this part that positive training for thinking skills, through change the individuals sight regarding his abilities and talents and makes rational thoughts, which increases the motivation and efforts to carry out the tasks and homework. Finally, after studying the effects of positive training for thinking skills as well as on getting ready for articles, it can be claimed that in this training style, based on the protocol, some trainings regarding how to eliminate failure memories, increasing self-confidence and satisfaction versus idealism were taught to the students' to show that these trainings results in rejecting the negative emotions, increasing selfconfidence, and finally increasing satisfaction in the student's that are encouraged to select and make a decision. As a result instead of comparing themselves to other and being deprecate their function, they move towards their activities insisting on their abilities and strengths. Therefore, this reduces their procrastination. Another contrast explains that due to the fact that individuals who procrastinate always estimate less time to do their activities, they are weaker in time recognition. Therefore, training of the daily homework program results in self-efficiency based on time management in the students', which also pushes them to do the tasks on time and decreases procrastination in the end.

These findings can be applied in psychology, counseling, and teaching as well as training, due to the fact that acquired results shows the effectiveness of positive thinking skills training. Since the current study was carried out on high school students' in Kermanshah city, the research results to other groups in other parts of the country and cultures, which faces some limitations. On the other hand, due to the fact that the group under studying was limited to the students' of a special academic period, we therefore cannot generalize the results to other students'. If the facilities are existed, this research can be carried out Table 4. The Summary of One Way Covariance Analysis Results in Ankova Text

Dependent Variable	Sum of Squares	df	Squares Mean	F	Significance Level
Getting ready for examination	541.27	2	270.63	46.78	0.001
Getting ready for the homeworks	682.40	2	341.20	31.46	0.001
Getting ready for final-term articles	857.63	2	428.82	39.15	0.001
Academic procrastination	6219.40	2	3109.70	71.70	0.001

on both (male/females) and a bigger sample and different zones have the possibility to generalize it to different populations.

### Acknowledgments

The authors would like to thank the participants of the study.

# Footnotes

Authors' Contribution: Somayeh Moradi, Mohsen Golmohammadian and Alireza Rashidi conceived the study, intervention sessions and collected the data. Mohsen Golmohammadian developed the methods and analyzed the data. All of the authors contributed to the revision of the manuscript and have read and approved the final version. Conflict of Interest: We have no financial interests related to the material in the manuscript. Additionally, we have no conflicts of interest. This manuscript has not been previously published or submitted. No other papers using the same data set have been published. All authors listed have contributed sufficiently to the study to be included as authors, and all those who are gualified to be authors are listed as authors. We hereby transfer, assign, or otherwise convey all copyright ownership, including any and all rights incidental thereto, exclusively to the journal, in the event that such work is published by the journal.

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