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Article

## Impact of Training on Positive Thinking for Improving Psychological Hardiness and Reducing Academic Stresses among Academically-late Students

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### Abstract

The current study investigated the impact of training on positive thinking in improving psychological hardiness and reducing academic stresses among students who are academically-late in Jordan. The study sample consisted of (28) male students in the seventh grade. They were chosen by the intentional method and distributed randomly to an experimental group and a control group of (14) students in each. The experimental group received (10) training sessions on positive thinking skills, and the control group did not participate in any training intervention. To achieve the objectives of the study, the psychological hardiness scale and the academic stress scale were used, and a set of positive thinking exercises was prepared by the researchers. The results of the study showed that there were statistically significant differences at the significance level ( $\alpha = 0.05$ ) between the mean scores of the experimental group and the control group in favor of the experimental group in improving psychological toughness and reducing academic pressures on the total score of the two scales. On sub-dimensions, it was recommended to employ positive thinking in situations Classroom instruction for its effectiveness in changing negative beliefs about many situations.

### Keywords

Academically-late students, Academic stresses, Positive thinking, Psychological hardiness,

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Academic tardiness or school delay is considered one of the educational and psychological problems that causes stress and tension. Many educational institutions suffer from it, and this in turn could scare children and adolescents and create for them a situation of inequality in educational and social aspects. Academic tardiness deprives students from some opportunities to access the educational services. Academic tardiness is defined as the failure to meet the academic school requirements (O'Connor et al., 2013). Donald et al. (2006) defined it as an achievement of less than the potentials while Reis and McCoach (2000) considered it the contradiction between the ability and the achievement. Beiranvand et al. (2019) pointed out that delay among the majority of students is due to several factors (i) individual related, which includes learner's personality issues such as weakness in academic skills and low readiness level (ii) family-related, including the absence of parental modeling, and the failure of the appropriate family follow-up of the learner, (iii) school-related, represented by the lack of school to offer the opportunity for students to express their talents, as well as the school's failure to rebuild the child's feeling and self-esteem (Chere & Hlalele, 2014).

Academically-late students often suffer from behavioral and emotional disorders, and a clear decline in self-competence and anxiety, despair, pessimism, and isolation. They often suffer from self-distrust and do not believe in their ability to achieve because they formulate a negative concept about themselves. Usually, they also suffer from impulsiveness, difficulty in concentration, and undue stress. They tend to be less responsible and less capable of solving problems, and they often had problems of adjustment, and negative thinking. They also avoid doing their school duties and other responsibilities related to the schoolwork. This often led to an academic problems related to school delay which required from those in charge of the educational process to address this problem related to the life of a large number of students in public and private schools, specifically in Jordan (Coon & Mitterer, 2012; Emina & Ikegbu, 2020; Reiss, 2008; Toniolo-Barrios & Pitt, 2021; Vaughn et al., 2007).

The current study aimed to investigate the impact of training in positive thinking to improve psychological hardiness and reduce academic stresses among students who are academically-late in Jordan. Positive thinking is a set of strategies to improve an individual's personality that appeared in different degrees such as optimism, emotional intelligence, conviction, self-efficiency, ability for achievement, desire for self-realization, encouragement on intimacy and love, openness on experience and diligence, ethical judgment, sense of beauty, tolerance, creativity, and looking forward to future (Csikszentmihalyi & Seligman, 2000; Kahraman & Koray, 2020). Training in positive thinking is defined as a set of organized and planned activities and experiences based on positive thinking, where late-school student participants are trained to improve and develop their positive thinking abilities. Likewise, psychological hardiness has dimensions such as patterns of psychological contracting that individual commit toward themselves, their goals, their values, and others around them. This pattern reflects individuals' beliefs that they can control events they face and carrying the responsibilities of those events. Whatever changes occur in their life aspects are considered essential for growth more than being a threat and a hindrance or a disability (Younkin, 1992). It is defined procedurally considering the degree which the students receive on the psychological hardiness scale used in this study.

Academic stresses in this study is defined as restrictions and requirements associated with the academic tasks that go beyond the internal and external capabilities of students (Lal, 2014) and known procedurally in light of the degree which the students receive on the academic stress scale used in this study. These stresses produce academically-late students, who are a group of students who suffer from emotional and behavioral disorders; who show constant insufficiency in the academic achievement, and who suffer from a noticeable reduction in the current class level. Such students are low-achievers as they do not possess an acceptable level of skills and knowledge and show low levels of educational goals achievement according to the standards of required educational level.

The current study devised a set of structured and time-framed training sessions based on Seligman (2002) model. There were (10) sessions of (60) minutes each based on ideas and methods of positive thinking, to improve psychological hardiness and reduce academic stresses in students among the late-school students. It was revealed the end of the experiment that the low-achievers make up the lowest group in their class performance by approximately (30%) of the total students in each class with (28) students, and use their school grades in all subjects for the three months that preceded the experiment as a classification standard (Sevimel-Sahin, 2020).

## Literature Review

### Psychological Hardiness

Psychological hardiness is defined as a set of personal features and characteristics, which generally create a source of strength in the face of stressful life events. Poursardar et al. (2013); Singh (2016) argued that psychological hardiness is a type of mechanism to battle the negative effects of stress, anxiety, depression, and the ability to overcome deprivation. The concept of psychological hardiness is attributed to the American psychologist Susan Kobasa during her preparation for PhD in 1977. It is considered a personal characteristic that enables individuals to deal with different life situations and fight the negative effects of the surrounding environment (Kobasa, 1982; Shah et al., 2020). The importance of psychological hardiness is manifested in its protection of humans from the effects of the different life stresses which makes human more optimistic and flexible and more capable of overcoming the stressful situations. Psychological hardiness also works to protect individuals from the physical diseases and mental disorders (Maddi & Kobasa, 1984).

According to Kadyrzhanov and Abdykaimova (2020); Kobasa (1982); Okpa et al. (2020) psychological hardiness consisted of three basic components which together form the stress-resistant personality features. First, “*challenge*” which is the individuals’ belief to face the psychological stress which is exciting and necessary for their growth. This makes them go more towards the initiatives and explore the surrounding environment. Individuals also become more motivated towards identifying the strategies that can help them to adapt with the intellectual burden, the requirements of social relations, and the response to regulations and laws. Second, “*commitment*” which refers to the self-contract between the individual and himself to achieve the self-goals and self-values, and also the goals of others in the surrounding environment. Third, “*control*” which is the individuals’ belief that they are able to control the events around them and take the responsibility of whatever they are exposed to. It is the ability of the individuals to make decisions, interpret the situations and the attitudes, and effectively face stresses.

Taylor and Orlick (2004); Tomteberget and Larsson (2020) pointed out that individuals who have high levels of psychological hardiness are characterized with perseverance, determination, cohesion, and high levels of self-control. In general, psychological and academic stresses for them are considered positive experience filled with hope and optimism, and it is an opportunity for growth and development not a type of threat. Abu Al-Saud (2015) identified the impact of a guidance program to improve psychological hardiness of adolescent inmates. The study sample consisted of (20) orphaned adolescents from the inmates of the association of Hope for Orphans Institute in Gaza who were divided into two groups, experimental and control group, consisting of (10) adolescents in each group. The results showed statistically significant differences between the means of grade levels of the experimental and control group members, in the posttest scores on the psychological hardiness scale, in favor of the experimental group.

Almahaireh et al. (2018) examined the impact of guidance program to improve psychological hardiness and positive use of social media sites among the students in Mu’tah University in Jordan. The study sample consisted of (30) students who were distributed randomly with (15) on the experimental group and (15) on the control groups. The results showed a statistically significant effect of guidance program on improving psychological hardiness among members of the experimental group in comparison with the control group. Abu Hammad (2019) examined the effectiveness of a psychodrama-based educational program in the development of psychological hardiness and social interaction skills among a sample children’s victims of wars and other crises. The study sample consisted of 52 male and female basic school students who had experienced wars and other crises. The results showed statistically significant differences between the means of the study sample members’ estimates on their psychological hardiness scale, and their social interaction skills scale, which was attributed to the effectiveness of a psychodrama-based educational program, in favor of the experimental group.

### Academic Stress

Academic stresses are defined as an individual's response to the requests related to the academic attitudes and

situations that go beyond the adaptive capabilities of the students (Wilks, 2008), where other researchers like (e.g., (Malach-Pines & Keinan, 2007; Topper, 2007; Vermunt & Steensma, 2005) described academic stresses as negative responses towards the imposed pressures on individuals from the surrounding environment. Pascoe et al. (2020) study confirmed that students in school face a wide range of ongoing stresses related to the academic requirements which are called academic stresses. These stresses arise among students whenever they face burdens that they cannot deal with according to their abilities and potentials (Richlin-Klonsky & Hoe, 2003). Agolla and Ongori (2009) pointed out that academic stresses are a negative reaction by the individuals who face the extreme burden or requirements imposed on them. Sarason et al. (1979) indicated that between (10-30%) of students suffer from academic stresses during their study years. The results of a study by the Organisation for Economic Co-operation and Development also showed that about (66%) of students in schools experimented academic stresses due to their low grades (Statistics., 2020).

Academic stresses are considered a health barrier in front of the students' academic performance and the mental health, the interaction with friends and others, and the participation in school life and activities (Owens et al., 2014). Some studies (e.g., (Agolla & Ongori, 2009; H, 2007; Malach-Pines & Keinan, 2007) argued that academic stresses accompanied by various symptoms, such as energy loss, high blood pressure, depressed mood, concentration difficulty, lack of insight, nervousness and tension, and lack of sleeping hours are caused by the increased academic burden and lack of time to meet the required obligations of tests. Lazarus and Folkman (1984) confirmed non-existence of stress in the event but it is a result of a negative evaluation of the event and the meaning we give to the stressful situation. Carver (2003) argued that negative way of thinking made the individual less capable of facing stresses and called for the importance of teaching the positive thinking to reduce and minimize the academic stresses.

### **Positive Thinking**

The concept of positive thinking returns to a known positive trend in psychology, which calls for the need to focus and pay attention to positive behaviors and phenomena of individuals more than negative behaviors (Csikszentmihalyi & Seligman, 2000; Masten & Reed, 2002). Yearley (1990) considered positive thinking as a set of positive strategies that reside in the individual's personality and achieve his desire to be a positive person in life through his desire to practice the behaviors that lead to a successful life. Positive thinking is considered one of the mechanisms that helps individuals to increase their personal achievements, and implement better strategies to effectively deal with the problems which surge individual's self-efficiency by understanding and mastering some special techniques (Augusto-Landa et al., 2011).

Positive thinkers are characterized by their ability to assess difficult situations with optimism and appreciate their ability to cope well with emergency situations. They will not allow negativity to invade their ideas and begin to investigate positive aspects while they are on their way to find a solution for those situations. They also showed adaptation with themselves, nature of their thoughts, and their feelings. They love life and appreciate it by changing their way of thinking from negative to positive. Positive thinkers also possess serious and genuine desire for change and have the ability to activate self-speaking strategy that enable them to monitor the evaluation of their inner thoughts and increase their ability to generate convictions directed toward their expectations, in order to succeed in solving problems and increase their ability to direct self-thinking management toward positivity, and achieving the voluntarily control of the thinking processes and its tendencies (Csikszentmihalyi & Seligman, 2000; Naseem & Khalid, 2010).

Positive thinking encourages perseverance, pursue to achieve goals effectively, and take steps to improve the quality of life (Froman, 2010). Kooshalshah et al. (2015) pointed out that training on positive thinking reduces stress, improves quality of life, reduces tension, increases psychosocial compatibility of individuals, and makes them more capable of managing the challenges, attitudes, situations, and events that cause the stress. Due to the importance of positive thinking and its impact on our lives by maintaining the success and increasing the energy of the individuals and their strength, and motivating them toward positive ideas, some researchers have examined

the impact of various training programs where some of it is based on positive thinking to improve psychological hardiness.

For instance, [Mehafarid et al. \(2015\)](#) detected the impact of training on positive thinking in improving the level of psychological hardiness, flexibility, and job fatigue among a sample of working nurses at government hospitals in Iran. The study sample consisted of (20) nurses each in experimental and control groups. The results showed that training on positive thinking was effective in improving the level of psychological hardiness. [Rastogi et al. \(2017\)](#) examined the effect of training on positive thinking in reducing stress and developing the problem-solving ability of ninth grade students in India. The participants were randomly divided into an experimental and a control group of (30) students each. The results of the study showed a statistically significant effect of positive thinking on reducing stress. [Naseem and Khalid \(2010\)](#) investigated the effects of training on positive thinking skills to increase hope and quality of life among drug addicts in Iran. The study comprised 15 participants each in an experimental and a control group. The results showed that training on positive thinking skills led to an increase in the hope and quality of life among members of the experimental group.

It is noticed that most of the above discussed studies have focused on examining the impact of positive thinking on improving and developing psychological hardiness and psychological flexibility ([Mehafarid et al., 2015](#)) and on increasing the hope and quality of life. It is also noticed that these studies were conducted on samples of drug addicts and nurses in hospitals, as well as in foreign environments. A few studies used the psychodrama as an educational method in the development of psychological hardiness e.g., ([Abu Hammad, 2019](#); [Almahaireh et al., 2018](#)), which used a mentoring program to improve psychological hardiness? There are however very few studies in connection with issues like reducing the academic stresses among students who are academically late, with the exception of the study ([Rastogi et al., 2017](#)) which examined the effect of training on positive thinking to reduce stress among ninth grade students in India. Therefore, the current study would attempt to fill this research gap as it examined the impact of a training program based on positive thinking on improving psychological hardiness and reducing academic stresses among a sample of academically-late school students in Jordan. This study may be considered as the first attempt to have focused on such a group of students that suffered a lot from the stress and lack of adaptation.

### **Problem statement**

The afore-mentioned studies are evidence that academically-late students have not received a share of attention and hence a research gap existed. These students suffer from a clear decline in psychological hardiness ([Johnsen et al., 2013](#)) and like other students, in the adolescence phase, they faced many psychological and academic stresses. It is expected that these stresses will have many of the negative effects on their personalities, their way of thinking, their feelings, and their behaviors which contributed to an increase in their mental disorders and behavioral abnormalities while they were exposed to the developmental, social, physiological, and intellectual changes that resulted in demands and needed attention. This study felt the need to rehabilitate, develop, and improve the personal aspects of this group of students. The educational goal for this group would be to design an educational process that should seek to achieve through various methods the required levels of psychological stability and emotional balance.

It is essential that these students should begin to participate in activities along with their peers and achieve positive results at academic and social levels and become capable of performing their duties and their roles. It is also hoped that they should be able to accomplish a decent growth in various fields of their lives. The current study, which is considered a pioneer study in Jordan, aimed to find ways how to improve the psychological hardiness of academically-late school students, and expected to help them to deal with the sources of academic stresses and reduce them through the implementation of a training on positive thinking, and adapt to their psychological and social environment ([Cole et al., 2004](#)).

## Research Questions

The current study aimed to answer the following questions:

1. Are there statistically significant differences at the level of significance ( $\alpha=0.05$ ) between the post means of students' grades on the psychological hardiness scale, attributed to the variables of (experimental, control) groups?
2. Are there statistically significant differences at the level of significance ( $\alpha=0.05$ ) between the post means of students' grades on each aspect of the academic stresses scale, attributed to the variables of (experimental, control) groups?

## Methods

### Research design

The researchers used the semi-experimental approach in this study as it was the most appropriate to achieve the study objectives and response to its questions. The study has one experimental group and one control group, who were given a pretest and a posttest as exhibited below:

G1	O1	X	O2
G2	O1		O2

G1 = the experimental group

G2 = the controlled group

O1= the pre-test

O2 = the post test

X = the processing

Mann Whitney test was used to detect the pretest and posttest differences between the members of the experimental group and the controlled group. The study included the following variables: *Independent variable*: Training program based on the positive thinking; *Dependent variables*: Psychological hardiness, academic stresses

### Sample

The study sample consisted of seventh grade late-school students at Samad Basic School for Boys, Directorate of Education in the Northern Mazar Region, Jordan. It included (28) students after reviewing their school results for the second semester of the academic year 2019/2020. The school was intentionally selected for administrative and technical considerations required by the study procedures. The students were randomly distributed into two groups, an experimental group of (14) students and a control group of (14) students.

### Instrument and procedure

To achieve the study objectives, the researchers used three instruments to measure psychological hardiness, academic stresses, and training program based on positive thinking. The following is a description of each:

#### The Psychological Hardiness Scale

The psychological hardiness scale, developed by Younkin (1992), was used in its initial form consisting of (29) items located in one dimension. The scale contained (17) positive items and (12) negative items, where the negative items were at serial number: (27, 25, 21, 20, 19, 16, 14, 13, 10, 6, 3, 2, 1). Each item had five choices (strongly agree, agree, unsure, disagree, and strongly disagree). The scale was translated for this study from English to Arabic and then presented to two reviewers specialized in psychology as well as proficient in English

language to ensure the accuracy of the translation. The validity and reliability indicators of the Psychological Hardiness Scale had been done in its original form (Younkin, 1992). The construct validity of the psychological hardiness scale was done through Pearson's Correlation Coefficients between the performance of items' scale and the performance as a whole ranged from (0.21- 0.73) and the majority of it ranged between (0.50-0.69). Younkin (1992) had also verified the reliability of the scale by calculating the stability factor with the internal consistency method according to the Cornbach Alpha equation and amounted to (0.92). These values are considered appropriate for the study purposes.

However, prior to using this Psychological Hardiness Scale, face validity and construct validity indicators were also measured. To verify the face validity of the psychological hardiness scale, the scale in its initial form was presented to (10) reviewers who were specialized in the fields of educational psychology, scale and evaluation, and psychological counseling. They were asked to express their opinions about the scale items, in terms of language formulation and its clarity, and any other modifications or notices they felt appropriate. Based on the opinions of the reviewers, five items were deleted because they did not measure the characteristic to be measured in this study, and the scale in its final form comprised (27) items. Similarly, the Correlation coefficients of the scale items with the overall degree were also calculated on an exploratory sample of (44) students, from outside of the study sample to verify the construct validity indicators of the psychological hardiness scale. The correlation coefficient here represented a sign of validity for each item, in the form of correlation coefficient between each paragraph and the total degree. The correlation coefficients of items with the instrument ranged from (0.27-0.66).

The test-retest method was used to verify the reliability of the study instrument by implementing the scale and re-implementing it after 2 weeks, on a group from outside of the study sample that consisted of (44) students. Pearson's correlation coefficient was calculated between their estimates which amounted to (0.86) both times. It also calculated the reliability coefficient with the internal consistency method by using the Cornbach Alpha equation which amounted to (0.82). These values were considered appropriate for the study purposes. The Five-point Likert Scale was used to measure the students' responses on the psychological hardiness scale, as follows: strongly agree =5, agree=4, neutral=3, disagree=2, strongly disagree=1. The scale also specified the psychological hardiness levels by using the following statistical criterion: Low level of the psychological hardiness (1.66-2.67), medium level of the psychological hardiness (2.68-3.66), and high level of the psychological hardiness (3.67 and above).

### **Academic Stress Scale**

The researchers used the academic stress scale developed by Lin and Chen (2009) which contained in its initial form (34) items distributed in (7) dimensions (teacher stresses, exam stresses, grade stresses, study stresses in groups, classmate stresses, time stresses, self-stresses). The scale was translated from English into Arabic by a specialist and then presented to two faculty members, one specialized in educational psychology and the other specialized in psychological counseling to verify the translation quality. The researchers took all their comments into consideration and revised some items accordingly but kept the number of items as is in the initial form of the scale. The developers of the scale indicated that it had the psychometric properties suitable for the study purposes. The researchers verified the scale validity in two ways: *Reviewers validity*: The researchers presented the scale in its initial form to (9) reviewers with educational, psychological, and psychological measurement and evaluation specialties from the faculty members of Al-Balqa Applied University. The acceptance test got (80%) of the reviewers' opinions on all the items without deleting any of them, where the notes limited only to the structure and clarity of some items. *Construct Validity*: The researchers verified the construct validity of the academic stresses scale by calculating the correlation coefficient between the degree of each item and the degree of the dimensions that belonged to those items. The correlation coefficients values ranged from (0.23-0.66) and considered an indication on the validity of the scale internal construction.

The researchers calculated the reliability coefficient of the academic stresses scale in two ways: *Test-retest the reliability*: The researchers implemented the scale twice with a two-week interval on a sample of (44) students from outside the study sample. The researchers also calculated the stability and reliability coefficients between the testers' degrees in the two implementation periods and found that the overall reliability of the scale by using the Pearson correlation coefficient was (0.88). This was considered an acceptable indicator on the reliability of the scale.

*Internal consistency/reliability*: The researchers calculated the Cornbach Alpha equation on the first implementation data of the sample that contained (44) students and the internal consistency coefficient value of the scale amounted to (0.91), and its dimensions ranged from (0.52-0.84).

The five Likert scale was used to correct the students' responses on the academic stresses scale, as follows: strongly agree =5, agree=4, neutral=3, disagree=2, strongly disagree=1. The scale also specified the academic stresses levels by using the following statistical criterion: Low level of the academic stresses (1.66-2.67), medium level of the academic stresses (2.68-3.66), and high level of the academic stresses (3.67 and above).

### Positive Thinking Training

The researchers built a set of exercise training based on positive thinking after referring to previous literature (e.g., (Beiranvand et al., 2019; Dargahi et al., 2015; Mehafarid et al., 2015; Seligman, 2002)), where some of them aimed to improve the psychological hardiness through training on positive thinking among samples from different segments. Training in this study aimed to develop positive thinking among academically-late school students and improve psychological hardiness as one of the variables that can help to reduce academic stresses by educating students about the importance of adopting positive ideas which include the meanings of optimism and success. In addition, the program emphasized the importance of freeing the self from negative ideas associated with the educational process and emphasized the importance of planning to achieve academic success and self-affirmation to reach the highest degrees of positive thinking.

The training of positive thinking included 10 training sessions:

- *Session 1*: Its aim was that the counselor and the participants, and the participants in the group to get to know each other, build new relationships, find a type of familiarity between group's members, introduce the program and its objectives, identify the criteria of teamwork, and determine the expectations of the participants about the program, as well as taking their approval to participate from all participants.
- *Session 2*: It aimed to define the concepts of positive thinking and negative thinking, its impact on our lives, and the difference between them. It also aimed to identify the nature of positive idea and the meanings it included like optimism and success.
- *Session 3*: It aimed to clarify the importance of forming positive tendencies toward educational topics, colleagues, and teachers, as well as its impact on their studies, achievements, and behaviors.
- *Session 4*: It aimed to train on changing the way of thinking towards positive, freedom from negative thoughts and feelings and change them towards the positive.
- *Session 5*: It aimed to train on several positive behaviors during the day to achieve a successful day and the importance of planning for the next day.
- *Session 6*: It aimed to train on the importance of using positive affirmations or expressions in our daily lives and make connection with positive students.
- *Session 7*: It aimed to train on the importance of positive perceptions or imaginations and its impact level on our daily lives, as well as help students to implement positive perceptions steps.
- *Session 8*: It aimed to train students on the way to achieve the meaning of happiness and some of the skills that enhanced the feeling of happiness.
- *Session 9*: It aimed to teach students the skill and benefits of optimism, and to distinguish between the



characteristics of optimists and pessimists.

- *Session 10 (the closing session):* It aimed to connect between the previous sessions, end the training process in an integrated manner, discuss the opinions of participants in the program, take their notes and their benefit level from the program, and thank the group members, and close the program.

Having finalized the instruments, the study was conducted according to the following steps:

1. Review the theoretical literature related to the current study topic.
2. Prepare the study tools after verifying the psychometric properties in its initial form.
3. Prepare the set of exercise on positive thinking and verify its validity.
4. Contact the school administration to set a date for the implementation of study tools.
5. Design training on positive thinking, and the school administration showed cooperation.
6. Identify the study population from the basic seventh grade male students.
7. Implement the study scales (psychological hardiness, academic stresses) to select the study sample.
8. Select the study sample according to the students' responses on the study items.
9. Distribute the sample members randomly on two study groups, where the experimental group received a training on the positive thinking skills while the controlled group did not receive any training.
10. Implement the training of the experimental group's members with two sessions a week, the duration of each session was (60) minutes.
11. Post implementation of the study instruments on the study sample members.
12. Enter data into the computer memory and process it using SPSS.
13. Test the study hypotheses and draw, discuss, and interpret the results.

## Results

### Group Parity: Pre-Psychological Hardiness Scale

To verify the groups' equivalence, the researchers calculated the means and standard deviations of the late-school student grades on the pre-psychological hardiness scale, according to the group variable (experimental, controlled) and to show the statistical differences between the means, the Mann-Whitney test was used as shown in Table 1.

**Table 1.** Differences in the performance of the experimental and control groups on the psychological hardiness scale in the pre-measurement

<i>Dimension</i>	<i>Group</i>	<i>No.</i>	<i>Medium of Ranks</i>	<i>Sum</i>	<i>Mean</i>	<i>Mann-Whitney U</i>	<i>Wilcoxon W</i>	<i>Calculated Z value</i>	<i>Sig</i>
Pre-psychological hardiness	Experi-mental	14	14.18	Ranks	3.06	93.500	198.500	-0.208	0.835
	Control	14	14.82	198.50	3.11				

Table 1 shows the non-existence of statistically significant differences at level ( $\alpha = 0.05$ ) that is attributed to the group in the post psychological hardiness scale, and this result indicated the parity of the groups.

### Group Parity: Pre-academic Stresses Scale

To verify the groups' equivalence, the researchers calculated the means and standard deviations of the late-school student grades on the pre-psychological hardiness scale, according to the group variable (experimental, control). Table 2 presents the statistical differences between the means in the Mann-Whitney test. To verify the groups' equivalence on the pre-academic stresses scale, Mann-Whitney test was used to calculate the significance differences of the study sample degrees on the stresses scale of the pre-measurement in the experimental and control groups (Table 2).

**Table 2.** Mann-Whitney test to calculate the significance differences in the experimental and control groups on the stresses scale of the pre-measurement

Dimension	Group	Number	Medium of Ranks	Sum of Ranks	Mean	Mann-Whitney U	Wilcoxon W	Calculated value	Z Sig
Pre-teachers stresses	Experimental	14	14.07	197.00	3.06	92.000	197.000	-0.278	0.781
	Controlled	14	14.93	209.00	3.22				
Pre-grades stresses	Experimental	14	14.82	207.50	3.14	93.500	198.500	-0.208	0.836
	Controlled	14	14.18	198.50	3.16				
Pre-exams stresses	Experimental	14	15.46	216.50	2.90	84.500	189.500	-0.622	0.534
	Controlled	14	13.54	189.50	2.76				
Pre-study stresses	Experimental	14	14.21	199.00	3.32	94.000	199.000	-0.186	0.853
	Controlled	14	14.79	207.00	3.29				
Pre-classmate stresses	Experimental	14	15.64	219.00	2.88	82.000	187.000	-0.738	0.460
	Controlled	14	13.36	187.00	2.64				
Pre-time stresses	Experimental	14	15.00	210.00	3.24	91.000	196.000	-0.325	0.745
	Controlled	14	14.00	196.00	3.21				
Pre-self-stresses	Experimental	14	13.39	187.50	3.07	82.500	187.500	-0.721	0.471
	Controlled	14	15.61	218.50	3.18				
Pre-Overall Degree	Experimental	14	14.36	201.00	3.08	96.000	201.000	-0.092	0.927
	Controlled	14	14.64	205.00	3.08				

Table 2 shows the non-existence of statistically significant differences at level ( $\alpha = 0.05$ ) that was attributed to the group in all dimensions, and in the overall degree of pre-stresses scale. The results also indicated the parity of the groups in Pre-academic Stresses Scale.

To answer the first question, it stated, “Are there statistically significant differences at the level of significance ( $\alpha=0.05$ ) between the post means of students' grades on the psychological hardiness scale, attributed to the variables of experimental and controlled groups?” Man-Whitney test was used to find the significant differences in the performance of the experimental and control groups on the psychological hardiness scale, in the posttest measurement.

**Table 3.** Differences in the performance of the experimental and controlled groups on the psychological hardiness scale, in the post measurement' Results of the Man-Whitney test: the significant differences in the performance of the experimental and control groups on the psychological hardiness scale, in the posttest measurement

Dimensions	Group	Number	Medium of Ranks	Sum of Ranks	Mean	Mann-Whitney U	Wilcoxon W	Calculated value	Z Sig
Post Psychological Hardiness	Experimental	14	18.57	260.00	3.80	41.000	146.000	-2.620	0.009
	Controlled	14	10.43	146.00	3.35				

It is shown from Table 3 that there were statistically significant differences at the level of significance ( $\alpha=0.05$ ) which were attributed to the groups in the post psychological hardiness scale, in favor of the experimental group.

To answer the second question, which stated, “Are there statistically significant differences at the level of significance ( $\alpha=0.05$ ) between the post means of students' grades on each aspect of the academic stresses scale, attributed to the variables of (experimental, controlled) groups?”, Man-Whitney test was used to find the significant differences in the performance of the experimental and control groups on each aspect of the academic stresses scale, in the post measurement (Table 4).

**Table 4.** Differences in the performance of the experimental and controlled groups on each aspect of the academic stresses scale, in the post measurement

*Man-Whitney test: the significant differences in the performance of the experimental and controlled groups on each aspect of the academic stresses scale, in the post measurement*

Dimensions	Group	Number	Medium of Ranks	Sum of Ranks	Mean	Mann-Whitney U	Wilcoxon W	Calculated Z value	Sig
Post teachers stresses	Experimental	14	9.64	135.00	2.32	30.000	135.000	-3.134	0.002
	Controlled	14	19.36	271.00	3.16				
Post grades stresses	Experimental	14	9.43	132.00	1.87	27.000	132.000	-3.273	0.001
	Controlled	14	19.57	274.00	2.99				
Post exams stresses	Experimental	14	11.64	163.00	1.97	58.000	163.000	-2.249	0.036
	Controlled	14	17.36	243.00	2.67				
Post study stresses	Experimental	14	10.07	141.00	2.27	36.000	141.000	-2.869	0.004
	Controlled	14	18.93	265.00	3.16				
Post classmate stresses	Experimental	14	12.18	170.50	1.59	65.500	170.500	-2.514	0.013
	Controlled	14	16.82	235.50	2.48				
Post time stresses	Experimental	14	8.96	125.50	1.55	20.500	125.500	-3.602	0.000
	Controlled	14	20.04	280.50	2.93				
Post self-stresses	Experimental	14	11.07	155.00	2.46	50.000	155.000	-2.232	0.026
	Controlled	14	17.93	251.00	3.00				
Post Overall Degree	Experimental	14	8.43	118.00	2.06	13.000	118.000	-3.907	0.000
	Controlled	14	20.57	288.00	2.94				

Table 4 shows that there are statistically significant differences at the level of significance ( $\alpha=0.05$ ) which are attributed to the groups, in all dimensions and in the overall degree of the academic stresses scale, in favor of the experimental group.

### Discussion

Regarding the results of the first question, the study found positive results in the experimental group members in the positive thinking-based training program. This program mainly focused on the need to adopt positive ideas, change negative ideas, and adjust perception to reality in an optimistic and logical way. This helped students to abandon negative beliefs that delay the achievement of their goals, aspirations towards the future, and their ambitions. The students' transition from perception to reality also enabled them to adapt to and face the emergency life situations where the training program gave them the opportunity to express their ideas and feelings freely away from the restrictions imposed in different situations, overcome the difficulties and psychological stress sources they faced, and fought the negative effects of the environment around them, which helped them to develop a better vision of future (Kobasa, 1982). The group leader also played a major role in developing and improving the communication mechanism between the participants, represented in the acceptance, sympathy, mutual respect, and the trust which effectively influenced the students' participation to perform the activities and tasks included in the program, and enhance independence and the self-confidence.

These results are in line with Mehafarid et al. (2015) findings which showed an impact of positive thinking based training program on improving the psychological hardiness level. They also agree with the results of Abu Al-Saud (2015) study which indicated that intellectual counseling program can improve psychological hardiness among the participants. The results are also consistent with the results of Almahaireh et al. (2018) which examined the impact of counseling program to improve psychological hardiness level.

Regarding the findings related to second question, it was evident from our results that positive thinking based on training program could prove a highly effective tool to change and modify students' beliefs and perceptions whenever it is used as planned. The positive thinking-based training program firstly helped to improve the psychological hardiness of students, which positively affected the students' attainment of the methods that enabled them to deal effectively with the stressful academic situations. This result can be attributed to all such training programs, which would include many educational situations and opportunities to allow students to

participate in group dialogues and discussions. It was evident in our findings that students in the experimental group showed a lot of integration and expressed feelings of security and freedom. They were able to modify and change their negative beliefs whenever they dealt with the academic stresses that they faced in schools, which helped them to overcome those stresses. This result is in line with the results of (Shokrpour et al., 2021) study which showed the effect of training on positive thinking in reducing the level of stress. It also agrees with the result of (Rastogi et al., 2017), which indicated that training in positive thinking reduced stress.

### Conclusion

The current study derived its significance from the importance of training on positive thinking and the need to develop skills and techniques that fell into the perspective of positive trends in psychology. The study acquired a special importance in theoretical and practical aspects. Theoretically, the study aimed to provide a set of exercises on positive thinking to improve psychological hardiness and reduce academic stresses among academically-late students, as a special category that actually required more attention and care in particular. This study is expected to be a quality addition through its enrichment of the theoretical literature related to positive thinking, as one of the mechanisms that can help individuals to increase their personal achievements, avoid negative thinking, and implement better strategies to deal with problems effectively, and improve psychological hardiness and reduce academic stresses of individuals. The study may also create a center for future studies and achieve research objectives that fell outside the current study. Practically, the study is manifested through the establishment set of exercise on positive thinking that can be implemented in basic and high schools for students, special education centers and institutions that deal with students who suffer from academic tardiness. It can provide decision makers in the educational process, counselors, and researchers with a scale for psychological hardiness and another scale for academic stresses which can be useful in diagnosing students' cases who suffer from low level of psychological hardiness and high level of academic stresses.

The study faced a few limitations too. First, the study sample was confined to only seventh grade late-school students at Samad Basic School for boys, Directorate of Education in the Northern Mazar Region for the 2019/2020 academic year. This means that results of the current study cannot be generalized on other samples to the extent that experiment sample characteristics may vary. The second limitation was in the use of research instruments. The results of the current study were determined by a training program based on positive thinking, customized for the sample of the study. Besides, the two scale, psychological hardiness and academic stresses, were also prepared for the current study. Although these scales proved efficient and effective in reaching the current study results, however, there would be a need to re-customize these scales to make them consistent with other samples in future studies.

In the light of the current study results, the study recommends employing the positive thinking training program in different classroom educational situations due to its effectiveness in changing negative beliefs and perceptions that students adopt toward a lot of situations and issues that affect their behaviors, adaptation, and growth. Secondly, the study recommends conducting studies that test the impact of training on positive thinking in the development and improvement of other variables, and in other age groups and segments such as high school students and university students.

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