

# THE EFFECTIVENESS OF A COGNITIVE-BEHAVIORAL PROGRAM TO ENHANCE GRATITUDE BEHAVIOR AMONG INTERNATIONAL STUDENTS OF THE ISLAMIC UNIVERSITY OF MADINA

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## ABSTRACT

The study sought to determine the efficacy of a cognitive-behavioural program for increasing appreciation behaviour among international students at the Islamic University of Madina. The study included 40 international students from the Islamic University, separated into two groups: an experimental group (n=20) with an average age of 22.5 ( $\pm$  2.03) and an identical control group (n=20) with an average age of 22.60 ( $\pm$ 2.05). The experimental sample members were given a cognitive-behavioural program to improve gratitude behaviour (prepared by the researcher) as well as a gratitude behaviour scale for both the control and experimental groups (prepared by the researcher). After the program was implemented, the study found that international students in the experimental group had increased their appreciation behaviour and scores, which were statistically considerably higher than those in the control group. Furthermore, the experimental group's thankfulness behaviour showed no statistically significant differences between the post-test and follow-up evaluations.

**Keywords:** Cognitive Behavioral Program -Behavior of gratitude- international students

## INTRODUCTION

Gratitude plays a key role in positive psychology, which improves mental health and social ties. Psychology studies how appreciation boosts pleasure and contentment. Gratitude also reduces anxiety and depression and improves mental wellness. Thus, appreciation is an important topic for psychology research since it boosts optimism, happiness, and positive social relationships. Given the significance of gratitude behavior, numerous psychological researchers have examined the concept (Al-Khawli, 2024; Taleb, 2024; Yang et al., 2024), emphasizing that the expression of gratitude in diverse life situations contributes to happiness. People often view gratitude as an emotional state that improves an individual's ability to adjust to life. This state signifies self-satisfaction and fosters positive social interactions in individuals.

Research by Qasim (2021), Gregory and Jantz (2014), and Sarwar (2024) indicates that gratitude positively correlates with life satisfaction and adaptation skills. This acknowledges the positive actions of others toward us and serves as an effective means to divert attention from negative experiences and feelings of disappointment. This encourages him to concentrate on the positive aspects of his life, resulting in consistently optimistic thinking. Gratitude can become a lasting habit through a conscious effort to recognize and appreciate the factors contributing to an individual's happiness. According to research, there is a statistically significant positive relationship between gratitude and a variety of constructs, including happiness and hope (Watkins et al., 2003), spiritual transcendence (Diessner & Lewis, 2007), religiosity, extraversion, openness, and positive emotions (McCullough et al., 2002), optimism (Chen et al., 2009), the tendency to forgive (Neto, 2007), and psychological well-being (Wood et al., 2009). In contrast, gratitude has a negative link with depression, negative emotions, and violence (Watkins et al., 2003), as well as materialism and attachment patterns (Dwiwardani et al., 2014; Murray & Hazelwood, 2011). As a result, the practice of thankfulness helps improve social relationships in general and students' wellbeing in particular.

When a student expresses gratitude and appreciation to others, he is better able to form healthy and meaningful relationships. Gratitude also helps improve student cooperation and understanding while reducing tension and social issues. Furthermore, expressing thanks among students promotes tolerance and mutual respect, as well as the strengthening of strong social interactions.

The cognitive behavioral program is an effective, scientifically-based treatment that provides direct and indirect instruction, especially for those greatly affected by events. This technique targets incorrect beliefs and misconceptions through psychological training to reduce psychological and behavioral difficulties. It helps people overcome obstacles and promotes happiness, tolerance, and satisfaction. The cognitive behavior program combines cognitive and behavioral methods (Essa, 2024; Taleb, 2024; Rajani et al., 2016). The previous presentation highlights the significance of grateful behavior as an effective positive strategy that individuals consistently encounter in various life situations. The phenomenon extends beyond mere individual sentiment derived from external assistance; it manifests through the individual's emphasis on the positive dimensions of their life and the active reinforcement of these aspects to foster personal positivity. Based on the aforementioned, the Islamic University of Medina developed a cognitive behavioral program aimed at enhancing the gratitude behavior of international students.

### RESEARCH PROBLEM

Gratitude serves as a positive variable that can facilitate the attainment of individual goals and enhance overall happiness, primarily through the quality of social relationships. This, in turn, bolsters an individual's capacity to confront life's changes, challenges, and pressures. It acts as a significant force in alleviating negative emotions and fostering a positive personality (Ablish, 2019; Ali and Waheeba, 2020; Mahmoud, 2018). Al-Khawli (2023), Muhammad (2023), and Yoshimura & Berzins (2017) define gratitude as experiencing joy upon receiving a gift, along with feelings of admiration, thanks, and appreciation for the benefits received. This emotion is associated with various positive social factors, psychological states, and health conditions. An individual demonstrates a high-value virtue and moral commitment when they receive benefits from others. The feeling of gratitude is a significant positive trait that enhances individual performance both personally and socially. Gratitude effectively contributes to the improvement and advancement of social relations by facilitating communication between individuals. Gratitude serves as an emotional response to individuals who provide valuable services, acting as a moral reinforce to enhance interpersonal relationships (Ali, 2020; Mahmoud, 2021; Miri, 2022).

Thus, gratitude is a cognitive and emotional action in which the individual experiences pleasant feelings toward others and their help and support in achieving their goals and removing hazards. As a preventive measure, gratitude supports mental and physical health. Gratitude boosts optimism and life satisfaction (Al-Khawli, 2024; Sharif, 2023; Abdel Fattah, 2020). Gratitude also boosts happiness, cheerfulness, and openness to connections, which can boost well-being. Gratitude encompasses three dimensions: intellectual perception, voluntary acknowledgement, and emotional appreciation. The convergence of the three stages results in the realization of gratitude. It conveys a sense of appreciation for an entity, goodwill towards that entity or its source, and the positive actions that arise from such appreciation and goodwill (Al-Khawli, 2023; Sarwar, 2024; Yang et al., 2024).

The significance of gratitude has prompted numerous studies on the subject. Emmons et al. (2020) demonstrated that gratitude is a significant positive trait that improves individual performance in both personal and social contexts. It holds a significant role for individuals and societies across various cultural and religious contexts. Throughout history, societies have highlighted the significance of gratitude. People view societies marked by gratitude as more positive, providing a crucial perspective on progress and social stability. Wilson et al. (2018) demonstrated that the practice of gratitude contributes to a reduction in stress levels. It enhances university students' capacity to concentrate in class, study effectively, and perform during exams while also promoting greater adaptability for overcoming learning challenges. Al-Maliki and Al-Kashki's study (2020) sought to examine the relationship between gratitude and life enjoyment among a sample of elderly individuals in Saudi Arabia. The study also aimed to identify differences in gratitude and life enjoyment based on various demographic characteristics, including gender, educational level, and health status. We quantify the contribution of gratitude to predicting life enjoyment as a percentage. The study results indicated a statistically significant correlation between gratitude and life enjoyment among a sample of Saudi elderly, revealing high levels of both gratitude and life enjoyment within the sample. Ling et al.'s (2020) study showed that gratitude alleviates depression symptoms in university students by fostering peace

of mind and reducing ruminative thinking. The study of Al-Nawajiha (2022) also sought to identify the six major personality factors, identify the level of gratitude, verify the predictive ability of the six major personality factors with gratitude, and reveal the differences in the six major personality factors and gratitude according to the gender variable. The results of the study showed that the level of gratitude and the six major personality factors were high, except for the acceptance dimension, which was moderate, and the emotional dimension, which was low. The results showed that the six major personality factors had a predictive ability with gratitude.

Prior research has addressed gratitude in teenagers, college students, and the elderly; however, no study has specifically examined gratitude among international students. This study aims to assess the efficacy of a cognitive-behavioral program in enhancing gratitude behavior among international students. The program's goals and approaches are essential for promoting grateful behavior among international students at the Islamic University of Madina. The program achieves this through dialogue and discussion, homework, problem-solving, modeling, relaxation, positive reinforcement, cognitive restructuring, imagination, desensitization, and self-monitoring. Therefore, the purpose of this research is to attempt to provide answers to the following questions:

1. Do the experimental and control groups exhibit differences in gratitude behavior enhancement following the program's implementation?
2. Do variations exist in the enhancement of gratitude behavior between the post- and follow-up measurements within the experimental group?

### RESEARCH OBJECTIVES

1. To identify the differences between the experimental and control groups following the implementation of the program aimed at enhancing gratitude behavior.
2. To elucidate the distinctions between the post- and follow-up measurements of the experimental group regarding the enhancement of gratitude behavior.

#### **Importance of the research (theoretical and practical dimensions)**

1. The behavior of gratitude is crucial for individuals because it is closely associated with essential life skills, including cooperation and creativity. Consequently, fostering a sense of gratitude is a vital resource that parents, teachers, and others interacting with young people should encourage during their development.
2. Highlighting the role of the cognitive-behavioral program in fostering grateful behavior among international students.
3. The significance of the age demographics of international students at the Islamic University of Madina and the necessity to foster gratitude behaviors.
4. Developing additional cognitive-behavioral programs to enhance happiness and tolerance among international students at the Islamic University of Madina.
5. This study offers a metric for gratitude behavior, thereby enhancing the psychological literature on measurement and diagnosis.

#### **Terms and Fundamental Concepts:**

##### **1) The concept of cognitive behavioral counseling:**

Cognitive behavioral counseling is a therapeutic approach that focuses on the interplay between thoughts, feelings, and behaviors. It aims to identify and modify negative thought patterns to improve emotional regulation and promote adaptive behavior. Al-Kafouri (2016) describes it as a modern therapeutic approach that emphasizes the cognitive perspective on emotional disorders. This method aims to demonstrate to the individual that irrational beliefs, expectations, negative thoughts, and self-degrading statements are the sources of maladaptive behavioral reactions. The objective is to modify these distorted cognitive elements and replace them with more appropriate thought patterns, thereby facilitating cognitive, behavioral, and emotional changes in individuals.

The researcher defines cognitive behavioral guidance as a procedural set of techniques, including lecture and discussion, fun and humor, homework, problem solving, modeling, relaxation, positive reinforcement, cognitive restructuring, imagination, allergy relief, and self-monitoring, employed in the study to enhance gratitude behaviors among international students at the Islamic University of Madina.

**The concept of gratitude behavior:** The concept of gratitude behavior is defined by Beken et al. (2018) as a positive emotion arising from an individual's awareness of life experiences. This includes actions and words

that express appreciation toward God, a person, or a specific situation. Gratitude manifests in various forms, including verbal, tangible, purposeful, and communicative expressions (p. 1673). According to Said (2014), it is "a positive cognitive and emotional evaluation that an individual makes towards the services given or provided to him in light of what the individual perceives as appreciation for these services and the benefits that he obtains, which leads to his readiness to act positively, thank the benefactors, and love others (p. 148). The researcher defines gratitude behavior procedurally as a positive personality trait. The behavior exhibited by the international student stems from a sense of gratitude towards God Almighty for His numerous blessings, as well as appreciation for others, including family, teachers, colleagues, friends, and any individuals who have offered support and assistance. The degree of international students' gratitude behavior is estimated using the scale employed in this study.

## THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

### Gratitude behavior:

Gratitude behavior holds significant importance in our lives, as it enables us to recognize and appreciate the positive aspects of our experiences. Gratitude-based behavior enhances feelings of happiness and satisfaction, leading to a greater appreciation for daily experiences. Gratitude behavior influences mental and emotional health, as well as social relationships.

The concept of "gratitude behavior" encompasses diverse perspectives due to the varying viewpoints and specializations of scholars in the field. Some scholars define it as "the individual's feeling of appreciation and gratitude for the gifts and benefits that he receives, whether from other people or from the Almighty God (Emmons et al., 2003; Watkins et al., 2003). Some researchers have characterized it as a moral-emotional trait involving an individual's effort to secure happiness for another through the act of gifting, regardless of the lack of benefit to the giver (Bono et al., 2004).

The functions of gratitude and its significance are evident in the perpetuation of sympathy. The expectation of receiving benefits in return for altruistic actions fosters a substantial portion of human interaction that is centered on giving, receiving, and reciprocating kindness. Consequently, gratitude plays a crucial role in organizing, consolidating, affirming, and reinforcing social relationships, thereby promoting positive behavior (Al-Khawli, 2023; Taleb, 2024; Yang et al., 2024). The research (Desouky, 2020; Armenta, 2017) identifies three habits that characterize grateful individuals: a tendency to feel agreeable, an appreciation for minor positive aspects of life, and a recognition of others' contributions. Gratitude can be assessed through various indicators, with the most significant being that the intensity of gratitude reflects the depth of the thankful experience, particularly when an individual observes a positive event. We anticipate heightened feelings of gratitude in a person who is less inclined to express gratitude. The expression of gratitude pertains to the life circumstances experienced by an individual, during which feelings of gratitude arise at a specific moment. We anticipate that an individual will express gratitude for familial support, employment, health, and various additional benefits received. Grateful individuals exhibit several characteristics, including a tendency to express gratitude for various charitable acts, empathize with others, and respond with positive emotions rather than resentment (Sharif, 2023; Abdel Fattah, 2020; Sarwar, 2024).

Following the logic of the last sentence, we can say that the act of gratitude positively influences individuals' self-satisfaction. A person's gratitude for enjoyment leads to feelings of satisfaction and personal happiness. The practice of gratitude contributes to the improvement of self-confidence, optimism, and psychological well-being. Consequently, individuals who engage in gratitude practices experience enhanced personal health and increased happiness. The expression of gratitude among students significantly influences their daily experiences and contributes to both personal and academic success, fostering positivity, happiness, and an appreciation for their blessings. The expression of gratitude is a significant factor in enhancing relationships among students, their peers, educators, and family members. The expression of gratitude positively influences students' academic performance and contributes to their success in studies.

### Psychological theories explaining gratitude:

The most notable psychological theories elucidating gratitude are briefly discussed below:

#### 1. Fredrickson's theory focuses on the expansion and construction of positive emotions (Fredrickson, 2001).

This theory posits that positive emotions, including joy, pride, contentment, and love, broaden an individual's range of thoughts and actions, thereby enhancing their physical, social, and mental resources. Receiving a benefit or gift can elicit the experience of gratitude, a positive emotion that can motivate individuals to engage in socially appropriate behaviors towards the benefactor or others. Grateful emotions can enhance an

individual's cognitive processes, prompting consideration of how to benefit others. Over time, these expanded experiences may facilitate the development of enduring social relationships and friendships.

Fredrickson posits that gratitude can facilitate the development of enduring relationships through the cultivation of positive emotions. This theory suggests that gratitude is associated with broadening an individual's cognitive scope, facilitating assistance to others, and fostering feelings of hope and optimism (McCullough & Witvliet, 2002).

## 2. Attribution theory:

Attribution theory is a fundamental concept in gratitude research. Weiner (1986) proposed that individuals with a propensity for gratitude are inclined to attribute outcomes, referred to as the "finds, remembers, connects" theory. This theory offers an alternative perspective on how gratitude improves interpersonal relationships. The concept posits that feelings of gratitude towards a benefactor enhance the grateful individual's awareness of the benefactor's valuable traits, thereby fostering a connection between the two individuals (O'Connell et al., 2016).

The proposed theories collectively conceptualize gratitude as a moral emotion, aligning with the functions identified by McCullough et al. (2002). Gratitude serves as a moral barometer, functioning as an emotional response to the benevolent actions of a moral agent, and acts as a moral motive that encourages the beneficiary to respond in a socially acceptable manner towards the moral agent. Moreover, it serves as a moral reinforce that increases the probability that the benefactor will participate in socially acceptable behaviors in the future (Ma et al., 2013).

## METHOD AND PROCEDURE

The current Research employs a quasi-experimental design involving two groups (experimental and control). The cognitive behavioral program, utilizing selected techniques, serves as the independent variable, while gratitude behavior is identified as the dependent variable.

### Research Community

The research community comprised all international undergraduate students at the Arabic Language Teaching Institute for Non-Native Speakers, newly enrolled at the Islamic University in Madina during the second semester of the academic year (1445 AH), corresponding to the year 2024, comprised the research community, totaling 1,100 students. The researcher focused solely on selecting a random sample of international undergraduate students.

### Sample and Procedure

- The study sample comprised 40 randomly selected international students, and the researcher administered the Gratitude Behavior Scale following verification of its psychometric properties.
- The researcher selected a random sample of 40 international students who scored the lowest on the Gratitude behavior Scale.
- The study sample comprised two groups: an experimental group and a control group. The experimental group of international students (n=20) had an average age of  $22.5 \pm 2.03$  years, while the control group (n=20) had an average age of 22.60 years, with a standard deviation of 2.05. The researcher created a gratitude behavior scale and administered it to the sample members after assessing its psychometric properties. The researcher also employed a socioeconomic level scale. The researcher designed a cognitive behavioral program and implemented it with the experimental sample, after a panel of psychology professors reviewed it to confirm its validity in enhancing gratitude behavior among international students.

The equivalence of the experimental and control groups was assessed based on age and socio-economic status. Table (1) illustrates the significance of the differences in age and socio-economic status between the experimental and control groups.

**Table 1: The significance of the differences in age and socioeconomic status between the experimental and control groups.**

Variable	Two Comparison groups	N	Mean	SD	T-Value	Sig Level
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Age	1	Experimental Group of International Students					
	2	Control group of international students	20 20	22.5 22.60	2.03 2.05	0.13	Insignific ant
Socioeconomic status		Experimental Group of International Students	20	45.33	1.61	0.11	Insignific ant
		Control group international students	20	44.25	1.50		

Table 1 shows that the study samples were similar in terms of age and socioeconomic position among international students, suggesting that there were no statistically significant differences between the two groups. The two study groups matched in their gratitude behavior before the program implementation (pre-test).

Table 2 reveals a statistically significant difference in the pre-test scores of the two groups on measures of thankful behavior prior to program implementation.

**Table 2: The significance of the differences between the mean scores of the experimental group and the control group In gratitude behavior before the implementation of the program (pre-test).**

Gratitude Behavior	Two Comparison groups	N	Mean	SD	T-Value	Sig Level
Gratitude to God	Experimental Group of International Students	20	21.2	1.9	0.32	Insignifi cant
	Control group of international students	20	20.4	1.7		
Gratitude to people	Experimental Group of International Students	20	25.3	2.2	0.35	Insignifi cant
	Control group international students	20	24.5	2.3		

Table 2 above shows that the two study groups' average gratitude behaviour scores before the training are not statistically different.

## RESEARCH TOOLS

### (a) Gratitude behavior scale (developed by researcher).

#### Scale- Design Steps:

1. The operational idea of thankfulness behavior was established.
2. Referring to previous scales and tests: Sabre (2011), Ibrahim (2016), Hossam (2016), Azab et al. (2019), and McCullough & et al.'s Gratitude Questionnaire, six item (GQ-6, 2022) scale.
3. Formulating the scale phrases: The scale initially had 40 phrases divided into two main dimensions: thanking God Almighty (20) items, and thanking People (20) items, which were clearly and easily formulated.

#### Psychometric Efficiency of Gratitude Behaviors Scale:

Gratitude Behaviour Scale psychometric efficiency was tested with 20 international students at the Islamic University who shared the same characteristics as the main study group.

#### First: calculating the scale of gratitude behavior stability:

– The test-retest method involved giving the gratitude behavior scale to the stability sample and then reapplying it 21 days later. Pearson's correlation coefficient showed that (r) was 0.86, a high stability coefficient.

– The gratitude behavior scale's Cronbach's alpha coefficient was 0.84, indicating strong stability.

Table 3 below exhibits the stability coefficients.

**Table 3 presents the reliability coefficients obtained through retests and Cronbach's alpha for the gratitude behavior scale among international students at the Islamic University, encompassing the total score and its dimensions with a sample size of N = 200.**

Gratitude Behavior Scale	Retest	Cronbach's alpha
Gratitude to the Almighty God	0.733	0.744

Gratitude to People	0.853	0.831
Total score	0.730	0.813

Table 3 indicates that the stability coefficients of the gratitude behavior scale, including the total score and dimensions, exhibit high stability values according to both the retesting method and Cronbach's alpha.

#### Second: Calculating the validity of the gratitude behavior scale:

##### • Validity of the external criterion.

To assess the validity of the external criterion of the gratitude behavior scale, the researcher computed the correlation coefficient ( $r$ ) between the scores of a sample of 20 international students on the gratitude scale. This was compared to scores on another external measure, the gratitude scale developed by Hiam Sabre (2018). A correlation coefficient of 0.770 was obtained, which is statistically significant at the 0.01 level, thereby indicating the validity of the external criterion of the scale.

• To assess internal consistency, the researcher calculated the correlation coefficients between participants' scores on each item of the gratitude behavior scale and the overall score for that dimension. The correlation coefficients for the first dimension, "Gratitude to the Almighty God," varied between 0.81 and 0.87. The coefficients for the second dimension, "Gratitude to People," varied between 0.74 and 0.87. The values demonstrate statistical significance at the 0.01 significance level. The values of ( $r$ ) were also calculated by correlating the subjects' scores in each dimension with their total scale scores.

**Table 4** presents the correlation coefficients (" $r$ " values) between the scores of the examinees in the sample assessing the psychometric properties of the scale across each dimension and their total scale scores.

**Table 4:** Values of the correlation coefficients " $r$ " between the examinees' scores on each dimension of the scale "the psychometric properties verification sample" and their scores on the scale's overall score

Total score of the Gratitude Behavior Scale dimensions	$r$ values
Gratitude to the Almighty God	0.80
Gratitude to People	0.78

Table 4 above indicates that the correlation coefficients " $r$ " between the examinees' scores in the sample for assessing the psychometric properties of the scale across each dimension and their total score ranged from 0.78 to 0.80, which are statistically significant at the 0.01 level.

#### The final form of the scale:

The final form of the scale comprises 40 phrases categorized into two dimensions: gratitude towards the Almighty God, containing 20 items (1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39), and gratitude towards people, also consisting of 20 items (2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40).

#### Gratitude Behavior Scale Scores:

The Gratitude Behaviour Scale included three response options for each statement: strongly agree, agree, and not sure, with consideration given to the phrasing of the statements. The total score on the scale varies from 40 to 120 degrees.

#### (b) Cognitive-behavioral program (prepared by the researcher)

The researcher developed a cognitive-behavioral program aimed at improving gratitude behavior.

#### Research procedures and field application:

The researcher undertook the following steps in composing this research:

1. Gather scientific materials pertinent to the theoretical framework and prior research
2. Developing a scale to assess gratitude behaviour among international students at the Islamic University among international students in light of the theoretical framework and previous studies.
3. Developing the scale based on the procedural concept and evaluating existing scales and tests.
4. Presenting the scales to the arbitrators and adjusting them based on their instructions.
5. Assessing the psychometric efficiency of the scales employed in the study by determining the stability of the scale through the test-retest method and calculating Cronbach's alpha coefficient. The validity of the gratitude behaviour scale was assessed through apparent validity, external criterion validity, and internal consistency validity methods.
6. Achieving the final form of the scale and confirming its preparedness for application.
7. Selecting the study sample and partitioning it into two equivalent groups via pre-measurement.

8. Developing a cognitive behavioural program to promote gratitude behaviour through the following steps:
  - (a) Reviewing theoretical frameworks and cognitive behavioural counselling intervention programs to enhance gratitude behaviour.
  - (b) Developing a preliminary outline of the program, which encompassed: an introduction to the program, its objectives, significance, foundational principles, target demographic, employed techniques, and the titles and content of the sessions.
  - (c) Presenting the program to a group of specialized arbitrators in the field of psychology, mental health, and psychological counseling in Medina.
9. To establish equivalence between the experimental and control groups, we selected a sample of international students exhibiting low levels of gratitude behavior and compared them based on chronological age, gratitude behavior, and socio-economic status.
10. The study sample has been divided into two groups:
  - (a) An experimental group consisting of 20 international students.
  - (b) A control group consisting of 20 international students.
11. Implementation of the training program for the experimental group.
12. Implementing post-measurement on the experimental and control study groups using the gratitude behavior scale.
13. Conducting the follow-up measurement on the experimental group by applying the gratitude behavior scale one month after applying the post-measurement to determine the extent of the continuity of the effect of the program used.
14. Processing data statistically using appropriate statistical methods.
15. Extracting and interpreting results.
16. Providing some recommendations and proposed research.

## RESULTS AND CONCLUSION

### Preliminary Analysis

#### (a) Results of the first hypothesis:

The preliminary hypothesis asserts that "the degrees of gratitude behavior increase statistically significantly in the experimental group than in the control group after applying the program." The validity of this hypothesis was confirmed by calculating the (t) test value, which compares the average degrees of gratitude in the experimental and control groups. The significance of the differences between the averages of the degrees of the experimental group and the control group on the gratitude behavior scale following the application of the program is illustrated in Table 6.

Table 6 illustrates the significance of the differences between the average scores of the experimental group and the control group on the gratitude behavior scale following the implementation of the program.

**Table 6**

Gratitude Behavior	Experimental group n = 20		Control group n = 20		T-values	Sig Level
	Mean	SD	Mean	SD		
Gratitude to the Almighty God	47.2	2.4	22.3	1.9	4.3	Sig 0.01
Gratitude to People	43.0	2.7	23.2	2.0	5.2	Sig 0.01
<b>Total score</b>	<b>90.2</b>	<b>5.1</b>	<b>45.5</b>	<b>3.9</b>	<b>7.01</b>	<b>Sig 0.01</b>

The first hypothesis was confirmed by the results in Table 6 above, as the experimental group members' scores in the expression of gratitude behavior increased in all dimensions: gratitude to the Almighty God, gratitude to people, and the total score after the program was implemented. This implies that the cognitive-behavioral program increased the level of gratitude behavior among the international students in the experimental group to a larger extent than it did among the international students in the control group, who were not exposed to the program.

The researcher attributes the differences observed between the experimental and control groups to the techniques employed to enhance gratitude behavior, which include dialogue and discussion, fun and humor,



homework, problem solving, modeling, relaxation, positive reinforcement, art, cognitive reconstruction, imagination, desensitization, and self-monitoring. This hypothesis matches with the findings of Yoshimura & Berzins (2017), Talib (2024), Liang et al. (2020), and Emmons et al. (2020), which found that guidance programs of all kinds reduce disturbed behaviors, develop interpersonal skills, and reduce psychological, physical, social, behavioral, and cognitive disorders in students.

**(b) Results of Second hypothesis:**

According to the second hypothesis, there are no statistically significant differences in the average scores of the experimental group in the post-test and follow-up assessments for gratitude behavior. The (t) value was calculated to determine the significance of the differences between the average scores of international students in the experimental group in the post-test and follow-up tests of gratitude behavior in order to verify the validity of this hypothesis. The statistical significance of the discrepancies between the average scores of the experimental group in the post-test and follow-up tests of gratitude behavior is illustrated in Table (7).

**Table 7** presents the significance of the differences between the average scores of international students in the experimental group during the post- and follow-up measurements of gratitude behavior.

Gratitude Behavior	Experimental group n = 20		Control group n = 20		T- values	Sig Level
	Mean	SD	Mean	SD		
Gratitude to the Almighty God	47.2	2.4	46.9	2.3	0.42	insignificant
Gratitude to People	43.0	2.7	44.7	2.5	0.45	insignificant
Total score	90.2	5.1	91.6	4.8	0.50	insignificant

Table 7 demonstrates that the second hypothesis was confirmed; the average scores of the experimental group of international students in the post- and follow-up assessments in behavior of gratitude in its dimensions: gratitude to the Almighty God, gratitude to people and the total score do not differ statistically significantly. This indicates that even after the program is over, the impact of the training that the international students in the experimental group received—which helped them increase their level of gratitude and retain the guidance benefits they learnt during the program sessions—remains and grows.

The results of this hypothesis are in line with the findings of studies by Yoshimura & Berzins (2017), Liang et al. (2020), and Emmons et al. (2020), which showed the importance of the guidance program in increasing the level of gratitude, the persistence of the training's effect on increasing the level of gratitude behavior in the experimental group, and the stability of the program's effectiveness one month after the application; the variety of techniques and activities employed in the training program.

In light of the results of this hypothesis, the researcher concludes from these findings that the experimental group was able to increase their gratitude to the Almighty God and to people as a whole because the program sessions helped them build cognitive skills, reconstruct their ideas, change their behaviors, and practice positive behaviors.

Based on this hypothesis, the researcher also found that the experimental group maintained the guidance skills acquired through various cognitive and behavioral techniques after the program ended, as well as the diversity and multiplicity of cognitive techniques, such as lectures and discussions, cognitive reconstruction, problem solving, and behavioral techniques. Maybe these techniques helped students gain cognitive and behavioral skills and the ability to increase gratitude, as confirmed by rational emotive therapy, which believes that if a person thinks and works enough to understand and review his belief systems, he can reach important, calming, healing, and comprehensive changes in his disturbing tendencies, and especially if he gets help to get rid of his irrational thinking. In addition to the researcher's ability to foster relationships of love and friendship, the functional techniques employed have transformed the trainees' personalities and perspectives on situations and events, thereby increasing their gratitude.

**Strength of the program's impact:**

The researcher used the Eta Square equation to estimate the program's impact

**Table 8** presents the size of the program's impact

Improving Gratitude Behavior	T-value	DF	Impact size ( $\eta^2$ )
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Gratitude to the Almighty God	0.42	26	0.44
Gratitude to People	0.45	26	0.50
<b>Total score</b>	<b>0.87</b>	<b>26</b>	<b>0.94</b>

The data presented in Table 8 indicates a large effect size for the program, exceeding 0.14 across all dimensions and the total score. The values of ( $\eta^2$ ) ranged from 0.44 to 0.94 for the dimensions of gratitude behavior, with a maximum value of 0.94 for the total score. This indicates that the experimental treatment accounts for 94% of the variance in gratitude behavior, demonstrating its effectiveness in enhancing gratitude levels within the experimental group. The significance of the cognitive-behavioral program in enhancing gratitude behavior is evident. The program employed positive reinforcement techniques, which are essential for consolidating and supporting the reinforced behavior. The researcher's ongoing evaluation of homework, an integral component of the cognitive-behavioral program, contributed to reinforcing and transferring the experiences addressed during the sessions.

#### **Results of homework follow-up:**

A key component in cognitive behavioral program sessions is homework. Complementary cognitive direction is required (Beck, 2007). The researcher observed that homework helps one achieve session and program goals which covered:

- A. Determining the causes of poor gratitude among international students, including attitudes, ideas, and feelings.
- B. Allowing kids to write about ungrateful emotions, thoughts, and experiences.
- C. Practice everyday relaxation.
- D. Identifying the most essential negative ideas or experiences that put the kid in a defenseless position and caused ungratefulness.
- E. Through homework, the researcher ensured that students understood the cognitive-behavioral formula for their condition by explaining each student's problem, its relationship to low gratitude behavior, and the guidance method used, and training on the fact that automatic beliefs and thoughts that cause ungratefulness and their physical, psychological, behavioral, and cognitive consequences are linked.

The following are the findings according to the final evaluation form that was completed by the researcher for the cognitive-behavioral program that was designed to improve the behavior of appreciation among international students:

The effectiveness of cognitive-behavioral programs is typically assessed through post-test and follow-up measurements. However, a significant and established procedure is the use of the cognitive-behavioral program evaluation form. The researcher developed the final evaluation form for the program to assess the degree to which international students benefited from the program in fostering gratitude behavior. It was disseminated during the final session of the program. This form included various reporting phrases for the final evaluation of the program, addressing goals, dates, session duration, session content, program activities, homework, relationships among international students, appropriateness of breaks, and the researcher's interactions with them. Four alternatives were identified for the response: (weak - acceptable - good - excellent). The cognitive behavioral program's objective of statistically significantly increasing the levels of gratitude behavior in the experimental group in comparison to the control group was successfully accomplished through the analysis of the experimental sample's responses. It showed that the experimental sample benefited from the program. This was demonstrated by the international students' dedication to attending the program sessions on a regular basis and adhering to the researcher's instructions at the Islamic University.

### **RECOMMENDATIONS AND PROPOSALS**

Due to application challenges, the researcher makes the following recommendations:

- 1- The facilitation of aural and visual media in the provision of psychological support by specialists to international students at the Islamic University of Madina.
- 2- Utilising the Cognitive Behavioral Program and the Gratitude behavior Enhancement Scale to improve the gratitude behavior of new international students in Medina and in centers that offer psychological support to students.
- 3- Using the study findings to guide cognitive behavioral initiatives for different student populations.

4- Encouraging the clinical psychologist to provide consultations regarding the psychological issues of international students in all institutions of the Kingdom of Saudi Arabia.

#### **Future research proposals**

Future research and study should focus on the following topics:

Future Research and Studies: In light of the findings, it is advised to conduct further research and studies in this field, including:

1-The efficacy of a cognitive-behavioral guidance program for improving wisdom behavior among overseas students.

2-The influence of a training program on a sample of international students' life satisfaction and its efficacy in helping them develop coping mechanisms for psychological stress.

3-The success of a reality-based program in fostering optimistic thinking among international students and how it affects their persistence behavior.

4-The efficacy of a cognitive-behavioral program in fostering optimism and hope among international students.

5-Investigating the correlation between gratitude and other positive variables, including spiritual intelligence and psychological resilience.

### **REFERENCES**

#### **TRANSLATED ARABIC REFERENCES**

‘Abd al-Fādī, ‘Afāf. (2019). "fa‘āliyat Barnāmaj Arshadī ma‘rifī sulūkī fī khafd alāhtrāq al-nafsī ladā al-muṭallaqāt ba‘da fatrat Zawāj wajīzah", Majallat Buhūth wa-dirāsāt nafsiyah, 15 (2), 236-298.

Ablysh, Hawwā’. (2019). "alāmtnān wa-‘alāqatuhu bālrdā ‘an al-ḥayāh ladā ‘ayyinaḥ min al-murāhiqīn bi-madīnat Zlītan", Majallat al-Jāmi‘ah al-Asmarīyah, 32 (2), 176-196.

Al-Furayj, Arīj. (2016). Al-Khaṣā’ish alsykwmtryh lmqyās alāmtnān ‘alā Hay’at min mu‘allimāt al-Ta‘līm al-‘āmm bi-Makkah al-Mukarramah [Risālat mājistīr ghayr manshūrah], Kullīyat al-Tarbiyah, Jāmi‘at Umm al-Qurā.

‘Alī, Hishām. (2020). "alt‘ātf wālāmtnān kmhddāt ll’ythār ladā ‘ayyinaḥ min al-ṭullāb al-mutafawwiqīn drāsyān", Majallat al-Baḥth fī al-Tarbiyah wa-‘ilm al-nafs, 35 (1), 168-236.

‘Alī, Jamāl Wuhaybah, Muḥammad. (2020). "al-binyah al-‘Āmilīyah wa-al-khaṣā’ish alsykwmtryh lmqyās alāmtnān ladā ṭullāb al-Jāmi‘ah", Majallat al-Jam‘īyah al-Tarbawīyah lil-Dirāsāt al-ijtimā‘īyah, (125), 55-77.

Al-Khūlī, Allāh. (2023). "al-Riḍā ‘an al-ḥayāh kmtghyr wasīt li-ta’tḥīr alāmtnān ‘an al-Sa‘ādah bayna ṭullāb al-Jāmi‘ah : dirāsah bi-istikhdām alnmdhjh al-binā’īyah", Majallat Kullīyat al-Tarbiyah bi-al-Iskandariyah, 33 (4), 157-198.

Al-Khūlī, Allāh. (2024). "fā‘ilīyat Barnāmaj Arshadī qā’im ‘alā Tadakhkhulāt alāmtnān fī Taḥsīn al-Sa‘ādah wa-al-riḍā ‘an al-ḥayāh ladā ṭalabat al-Jāmi‘ah", Majallat Kullīyat al-Tarbiyah bi-Asyūt, 44 (4), 1-68.

Al-Kufūrī, Ṣubḥī. (2016). Al-Irshād al-ma‘rifī al-sulūkī, Dār al-Anjlū al-Miṣriyah, al-Qāhirah.

Al-Mālikī, Arīj wālkshky, Majdah. (2020). "alāmtnān wa-‘alāqatuhu bālāstmtā’ bi-al-ḥayāh ladā ‘ayyinaḥ min kibār al-Sinn al-Sa‘ūdīyīn", Majallat Dirāsāt ‘Arabīyah fī al-Tarbiyah wa-‘ilm al-nafs, (124), 61-110.

Alnwājḥh, Zuhayr. (2022). "al-qudrah altnb’yḥ lil-‘awāmil al-sittah al-Kubrā lil-shakhṣīyah bālāmtnān ladā ṭalabat Jāmi‘at al-Aqṣā", Majallat al-Ādāb lil-Dirāsāt al-nafsiyah wa-al-tarbawīyah, (14), 49-76.

Al-Shāfi‘ī, Nahlah. (2017). "al-Is’hām al-nisbī llāmtnān wālḥs al-fukāhī fī al-tanabbu’ bālmrwnh al-nafsiyah ladā ṭullāb al-Jāmi‘ah", Majallat Kullīyat al-Tarbiyah bi-al-Iskandariyah, 27 (2), 335-384.

‘Azab, Ḥusām, Muṣṭafā, Sārah wa-miṣbāḥ, Nirmīn. (2019). "al-kafā’ah alsykwmtryh lmqyās alāmtnān ladā ‘ayyinaḥ min ṭalabat al-Jāmi‘ah", Majallat Kullīyat al-Tarbiyah fī al-‘Ulūm al-nafsiyah, 2 (43), 154-190.

Bayk, jwdyṭh. (2007). al-‘ilāj al-ma‘rifī al-Usus wa-al-ab‘ād, (tarjamāt : Ṭal‘at Maṭar), al-mashrū‘ al-Qawmī lil-Tarjamah, al-Qāhirah.

‘Bdālfṭāḥ, Asmā’. (2020). "alāmtnān wjwdh al-nawm kmnb’ llḥywyh al-dhātīyah ladā ṭullāb Kullīyat al-Tarbiyah Jāmi‘at al-Minyā", Majallat al-Baḥth fī al-Tarbiyah wa-‘ilm al-nafs, 35 (1), 258-316.

Dasūqī, Ḥanān. (2020). "al-namūdhaj al-binā’ī lil-‘alāqāt al-sababīyah bayna al-Yaqzah al-dhihnīyah wālāmtnān wālkfā’h al-dhātīyah almdrkḥ ladā ṭullāb al-Jāmi‘ah", al-Majallah al-Tarbawīyah, (87), 1736-1780.

Ibrāhīm, Hawwā’. (2016). al-Is’hām al-nisbī lil-ṣumūd al-nafsi wālāmtnān fī al-tanabbu’ bālrdā ‘an al-ḥayāh ladā al-murāhiqīn al-Aytām [Risālat mājistīr], Kullīyat al-banāt, Jāmi‘at ‘Ayn Shams.

- Maḥmūd, Manāl. (2018). "al-Taḥayyuz al-ma'rifī wālāmtnān kmnb'āt bālšmwd al-Akādīmī ladā 'ayyinaḥ min ṭalabat al-marḥalah al-thānawīyah", Majallat al-Tarbiyah bi-Jāmi'at al-Azhar, 1 (180), 648 – 708.
- Maḥmūd, Rīm. (2021). "alāmtnān al-ijtimā'ī wa-'alāqatuhu bi-ba'ḍ al-mutaghayyirāt al-dīmūghrāfiyah ladā 'ayyinaḥ min ṭullāb al-Jāmi'ah al-mutafawwiqīn drāsyān", Majallat Kullīyat al-Tarbiyah bi-Sūhāj, (11), 1214-1247.
- Mīrī, al-Walīd. (2022). "Dawr alāmtnān wa-al-thiqah bi-al-nafs fī al-tanabbu' bāltwāfq ma'a al-ḥayāh al-Jāmi'iyah ladā ṭullāb Jāmi'at al-Imām Muḥammad ibn Sa'ūd al-Islāmīyah", Majallat al-Irshād al-nafsī, 1 (71), 1-53.
- Muḥammad, Marwah. (2023). "nmdhjh al-'Alāqāt al-sababīyah li-kull min alāmtnān wa-irādat al-ḥayāh wa-al-iḥbāt al-wujūdī ladā ṭullāb Jāmi'at Ḥulwān", Majallat Dirāsāt tarbawīyah wa-ijtimā'īyah, 29, 418-535.
- Qāsim, 'bdālmryd. (2020). "al-namūdḥaj al-sababī lil-'alāqāt al-mutabādalah bayna al-ṭayyibah wālāmtnān wa-al-ta'āwunīyah fī al-shakhṣīyah ladā al-murāhiqīn wālraṣhdyn", al-Majallah al-Miṣrīyah lil-Dirāsāt al-nafsīyah, 30 (108), 180-236.
- Šābir, Hiyām. (2011). miqyās alāmtnān lil-murāhiqīn alfā'qyn akādymyan, Dār al-Sharq lil-Ṭibā'ah wa-al-Nashr, al-Qāhirah.
- Sa'id, Hānī. (2014). "al-Is'hām al-nisbī lil-Tasāmuḥ wālāmtnān fī al-tanabbu' bāls'adh ladā ṭullāb al-Jāmi'ah dirāsah fī 'ilm al-nafs al-ijābī", Dirāsāt nafsiyah. 24 (2), 143-1
- Sharīf, shyhl. (2023). "nmdhjh al-'Alāqāt al-sababīyah bayna alāmtnān wa-al-infiṣāl al-akhlaqī wālshfqh bi-al-Dhāt wāltmnr alsybrāny ladā ṭullāb Jāmi'at al-Azhar", Majallat Kullīyat al-Tarbiyah, Jāmi'at 'Ayn Shams, 2 (47), 107-238.
- Ṭālib, Ziyād. (2024). "fā'ilīyat Barnāmaj Arshadī ma'rifi sulūkī li-kḥafḍ mustawā al-qalaq al-nafsī ladā ṭalabat al-marḥalah al-thānawīyah bi-madīnat 'Adan", Majallat Kullīyat al-Ādāb bqnā, 33 (62), 703-741.

#### ENGLISH REFERENCES:

- Armenta, Christina N.; Fritz, Megan M. & Lyubomirsky, Sonja. (2017). "Functions of Positive Emotions: Gratitude as a Motivator of Self-Improvement and Positive Change". *Emotion Review*, 9(3), 183-190.
- Beken, Lilian Jans & Lataster, Johan & Peels, Denise & Lechner, Lilian and Jacobs, Nele (2018). Gratitude, "Psychopathology and Subjective Well-Being: Results from a 7.5-Month Prospective General Population Study", *Journal of Happiness Studies*, 19(6): 1673-1689
- Bono, G., Emmons, R.A., & McCullough, M.E. (2004). *Gratitude in practice and the practice of gratitude*. In P.A. Linley & S. Joseph (Eds), *Positive Psychology in Practice*, New Jersey John Wiley & Sons, 464-481.
- Brandtjen, A. (2014). Attitude of Gratitude: Clinician Views on Inc. Fostering Gratitude in One Homecare and Hospice Agency [*Master Thesis*], University of Catherine.
- Breen, W.E., Kashdan, T.B., Lenser, M.L., & Fincham, F.D (2010). "Gratitude and forgiveness: Convergence and divergence on Personality and individual Differences", (49), 932-937
- Chan, D. W. (2010). Gratitude, gratitude intervention and subjective well-being among Chinese school teachers in Hong Kong, *Educational Psychology*, (30), 139-153
- Chen, J. Chen, J. Kee, Y.& Tasi, Y. (2009). "Validation of the gratitude Questionnaire in Taiwanese Undergraduate Students". *Journal of Happiness Studies*, 10(6), 655-
- Diessner, R., & Lewis, G. (2007). Further Validation of the Gratitude, Resentment, and Appreciation Test (GRAT). *Journal of Social Psychology*, 147(4), 445-447
- Dwiwardani, C., Hill, P. Bollinger, R. Marks, L. Hook, J. & Davis, D.& et al., (2014). "Virtues develop from a secure base: attachment and resilience as predictors of humility, gratitude, and forgiveness", *Journal of Psychology & Theology*, 42(1), 83-90.
- Emmons, R., & Crumpler, C. (2020). "Gratitude As A Human Strength: Appraising The Evidence", *Journal of Social And Clinical Psychology*, (19), 56-69.
- Emmons, R., McCullough, M. & Tsang, J. (2003). The assessment of gratitude (2003). In S. J. Lopez & C.R. Snyder (Eds.) *Positive psychological assessment: A handbook of models and measures*, Washington, D.C.: American Psychological Association, 327-341.
- Fagley, N.S. (2012). "Appreciation uniquely predicts life satisfaction above demographics, the big 5 personality factors, and gratitude", *Personality and Individual Differences*, 53, 59-63.
- Fredrickson, B. (2001). "The role of positive emotions in positive psychology: The broaden- and-build theory of positive emotions", *American Psychologist*, 56, 218-226.
- Gregory ,L& Jantz,y (2014). 6 Ways to Become More Positive Today, Retrieved 26-5-2018 <https://www.psychologytoday.com/intl>

- Hlava, P., Elfers, J., & Offringa, R. (2022). "Atranscendent View Of Gratitude; The Transpersonal Gratitude Scale", *International Journal of Transpersonal Studies*, 33(1), 1-14
- Liang, H. Chen, Ch. Li, F. Wu, Sh. Wang, L. Zheng, X. & Zeng, B.(2020). "Mediating effects of peace of mind and rumination on the relationship between gratitude and depression among Chinese university students", *Current Psychology*, 39,1430-1437.
- Ma, M., Kibler, J. & Sly, K. (2013). "Gratitude is associated with greater levels of protective factors and lower levels of risks in African American", *Journal of Adolescence*, 36, 983-991.
- McCullough, M. Witvliet, C. (2002). *The Psychology of forgiveness*. In C.R. Synder, & S. J. Lopez (Eds.) *Handbook of positive Psychology*, New York: Oxford University Press, 446-458.
- McCullough, M., Emmons, R. & Tsang, J. (2002). "The grateful disposition: A conceptual and empirical topography", *Journal of Personality and Social Psychology*, 82(1), 27-112.
- Murray, A. & Hazelwood, Z. (2011). "Being gratitude: Does it bring us closer? Gratitude, Attachment and intimacy in romantic relationships", *Journal of Relationships Research*, 2, 17-25.
- Rajani, A., Azizi, L. , Naeemi, S. , Ali, Amiri, A. , Javidan, M. J. , Abad, H .& Hosseini, K. (2016). "The Effect Of Cognitive Behavioral Couple Therapy On Reduction Of Marital Conflicts And Burnout Of Couples", *The Turkish Online Journal Of Design, Art And Communication*, 1649-1655.
- Sarwar, Uzma; Arfeen, Maryam & Munawar, Mahshamin. (2024). "Mediating Effect of Coping Strategies in the Relationship between Gratitude and Life Satisfaction among Professionals". *Journal of Development and Social Sciences*, 5(2), 164-174.
- Toussaint, L., & Friedman, P. (2009). "Forgiveness, Gratitude, and Well Being: The Mediating Role of Affect and Beliefs", *Journal of Happiness Studies*, 10(6), 635-654.
- Wardhani N, Agustiani H, Juliana I, Gimmy. A (2020). "An exploration of gratitude themes and dynamics in academic context: an initial study on students in Indonesia", *Eurasian Journal of Biosciences*, 14(2), 7133-7136.
- Watkins, P., Woodward, K., Stone, T. & Kolts, P. (2003). "Gratitude and Happiness: Development of a measure of gratitude, and relationships with subjective well-being", *Social Behavior and Personality and International Journal*, 31 (5), 431-451.
- Wells. T & Albright. L & Keown, K & Tkatch. R & Duffy. M & Wu. L and Wicker E. (2018). "Expressive Writing: Improving Optimism, Purpose, and Resilience Writing and Gratitude", *Innovation in Aging*, 2(1), 241.
- Wood, A. M., Maltby, J., Stewart, N., & Joseph, S. (2008). "Conceptualizing gratitude and appreciation as a unitary personality trait", *Personality and individual differences*, 44(3), 621-632.
- Wood, A., Froh, J., & Geraghty, A. (2010). "Gratitude And Well-Being: A Review And Theoretical Integration", *Clinical Psychology Review*, 1-16.
- Yang, Kairong; Zhang, Linting; Li, Wenjie; Jia, Ning & Kong, Feng. (2024). "Gratitude predicts well-being via resilience and social support in emerging adults: a daily diary study", *The Journal of Positive Psychology*.
- Yoshimura, S. & Berzins, K. (2017). "Grateful experiences and expressions: the role of gratitude expressions in the link between gratitude experiences and wellbeing", *Review of Communication*, 17(2), 106-118.