Iranian Educational Psychology Association

Iranian Journal of Learning and Memory

Print ISSN: 2645 - 5455
Online ISSN: 2645 - 5457

Homepage: https://journal.iepa.ir

# Comparing the Effects of General and Personal Wisdom Therapy on Students' Academic Procrastination

**Leyla Zarei[1], Rasool Kord noghabi[2]✉, Afshin Afzali[3], and Mohammad Reza Zoghi Paidar[4]**

1. Department of Psychology, Bu-Ali Sina University, Hamedan, Iran. E-mail: l.zarei.ml@gmail.com
2. *Corresponding author*, Department of Psychology, Bu-Ali Sina University, Hamedan, Iran. E-mail: r.kordnoghabi@basu.ac.ir
3. Department of Psychology, Bu-Ali Sina University, Hamedan, Iran. E-mail: afzali.afshin@basu.ac.ir
2. 4. Department of Psychology, Bu-Ali Sina University, Hamedan, Iran. E-mail: m.r.zoghipaidar@basu.ac.ir

## Article Info

**Article type**:
Research Article

**Article history:**
Received October 15, 2024
Received in revised form December 16, 2024
Accepted December 20, 2024
Published online December 26, 2024

**Keywords:**
procrastination
students
wisdom
wisdom therapy

## ABSTRACT

**Objective**: This study investigated the effect of wisdom therapy (general and personal) on academic procrastination among elementary school students.

**Method**: This quasi-experimental study used a pre-test/post-test design with three groups: two experimental and one control. The population included 230 female students from a primary school (grades 4–6) in Songhor Kolyaei County during 2021–2022. Fifty-one students identified as high academic procrastinators (top 25% in delayed homework submission) were randomly selected and assigned to the experimental and control groups, each including 17 students. Academic procrastination was assessed behaviorally through direct observation and systematic recording of delays in submitting a non-curricular assignment over three stages. The experimental groups received six weekly 60-minute wisdom therapy sessions based on Kord Noqabi's Wisdom Therapy (2020), focusing on reflective thinking, identifying cognitive distortions, clarifying personal values, and creating action plans. The control group received no intervention. Data were analyzed using multivariate analysis of covariance (MANCOVA) in SPSS version 22.

**Results**: Both experimental groups showed a significant reduction in academic procrastination ($p < .01$), with personal wisdom therapy demonstrating a stronger effect than general wisdom therapy ($p < .05$).

**Conclusions**: Wisdom therapy effectively reduces academic procrastination among elementary students. Incorporating wisdom-based strategies into educational programs is recommended to enhance academic responsibility and student performance.

**Cite this article:** Zarei, L., Kord noghabi, R., Afzali, A., & Zoghi Paidar, M. R. (2024). Comparing the Effects of General and Personal Wisdom Therapy on Students' Academic Procrastination. *Iranian Journal of Learning and Memory*, *7* (28), 103-123. DOI: http//doi.org/10.22034/iepa.2025.518114.1533

© The Author(s).
Publisher: Iranian Educational Research Association.
DOI: http//doi.org/10.22034/iepa.2025.518114.1533

## Introduction

Procrastination is defined as the failure to carry out duties and responsibilities in a timely and expected manner, size, and time, referring to postponing one's tasks. Moreover, "Academic procrastination" is one of the most common problems at various levels of education, which refers to the dominant tendency of learners to delay academic activities and goals, to the extent that it affects optimal performance (Balkis & Doro, 2009). In other words, academic procrastination is avoiding doing homework, neglecting to prepare for exams and writing essays in the last moments of the academic semester which almost always has a bad effect on the productivity and well-being of people. Procrastination regarding academic assignments is a common problem among students and one of the most important causes of learners' failures in learning and achieving academic progress. They report that they frequently procrastinate to a degree that causes them stress, which results in their poor academic performance (Balkis & Doro, 2009).

Mousavi et al. (2019) reported that 31.7 percent of female students had high procrastination and 26.6 percent had very high procrastination in Tehran indicating that a large number of students in high schools are procrastinating. According to Moon and Illingworth (2005), procrastination has various types, but the most common type is the academic procrastination. Researchers have reported the negative effects of procrastination on learning and progress, such as lower class rank and dropping out of school (Aremu et al., 2013).

The finding of psychologists show that academic procrastination is related to many variables related to a person's personality and behavior, among which the following can be mentioned: personality factors, mental health, personality disorders, low self-regulation, poor self-efficacy, and perfectionism, negativity, unhealthy interpersonal relationships, external locus of control, overestimation of time, guilt, weak self-concept, despair, low self-esteem, low self-confidence, emotional intelligence, parental procrastination, classroom atmosphere, teaching method, and communication with teacher (Balkis & Duro, 2009).

The concept of wisdom was coined in the 1920s by Hall (1922) referring to the ideal endpoint of human development. The concept was isolated and forgotten until the early and mid-1970s, when empirical research on wisdom began (Staudinger & Gluck, 2011). Kunzmann (2004) defined wisdom as "a complete integration of knowledge, character, mind, and virtue". As Bergsma and Ardelt (2012) pointed out, wise people have many positive characteristics, including mature personality, superior judgment skills, and the ability to cope with life's problems. According to Ardelt (2003), wisdom is a combination of cognitive, reflective, and emotional personality traits that exist in a person, and the combination of these three elements is the source of a person's wisdom. According to the research of Gluck et al. (2005), wisdom's growth and promotion should happen in childhood and adolescence which would be fruitful and more effective.

In the science of psychology, wisdom can be considered as a personality trait (Noftle et al., 2011), a cognitive ability (Baltes & Staudinger, 2000) or a combination of both (Csikszentmihalyi & Rathunde, 1990). Wisdom is a rare human quality which is difficult to conceptualize and operationalize, and its complex nature has made the research in this field costly and time-consuming (Sternberg, 2004). Zhang et al. (2023) have proposed classifications of wisdom according to previous research including: 1- theoretical and practical wisdom; 2- Conventional wisdom and emerging wisdom; 3- Wisdom based on totality and depth; 4- Human and natural wisdom; and 5- Personal and general wisdom.

Personal wisdom is the lessons people learn from their personal lives. The learning that comes from one's own experiences and the insights that people gradually gain throughout their lives from a number of good and bad experiences are among personal wisdom. General wisdom refers to learnings in the form of knowledge, science, religion, philosophy, and art, recommended by scientific, philosophical, spiritual, and social wise men. Also, the ethical recommendations that are found in many hadiths, verses, and books, all of them are of general wisdom type (Kord Noghabi, 2021). In explaining the difference between personal and general wisdom, Staudinger (2011) wrote: Personal wisdom refers to a person’s personal vision and his/her understanding of himself/herself and his/her life, while general wisdom is a person's vision and understanding of life in general and from the perspective of an observer. It is not directly related to a person's personal life. However, these two types of wisdom are related and together form the basic components of the overall structure of wisdom, but they are not identical in a person.

In some research such as the one done by Abd Khodayi and Gholamzadeh (2019), comparing the effectiveness of Alice's academic and logical-emotional self-regulation training on reducing self-handicapping and academic procrastination of students, the study by Hashemi Gerji et al. (2014) on the effectiveness of Welsh metacognitive group training and cognitive and behavioral management of stress on academic procrastination of secondary school female students, and Shaygan (2022) on the effectiveness of emotional intelligence training on academic procrastination and academic vitality of secondary school students, many components were used to reduce work procrastination are a part of wisdom components, but in no research, wisdom instruction has been used to reduce work procrastination.

Ardelt (2021) in his research on three-dimensional wisdom and perceived stress among university students concluded that as the wisdom grew in students, the amount of their stress decreased. Azarbadkan and Asghari Ebrahimabad (2017) in their research found that it is possible to predict students' academic procrastination based on their self-impairment and stress caused by their academic expectations. Also, by reducing stress and managing self-incapacitation, it is possible to prevent the increase of procrastination among students. Based on the results reported by Hashemi Garm Darre and Yousefi (2021), wisdom training is a suitable method to improve

social skills and resilience of female adolescent. Yarahmadi et al. (2018) studied the effectiveness of an educational program based on academic resilience in academic procrastination and academic performance of students and found that an educational program based on academic resilience can be a suitable implementation solution to reduce academic procrastination and also increase the academic performance of students. Mohammadi Azad (2022) also concluded that academic procrastination can be predicted through academic identity and academic resilience indicating students' procrastination can be reduced by increasing academic identity and academic resilience. The research findings of Shoghi et al. (2022) showed that wisdom-therapy increases the psychological competence and also the resilience, self-efficacy, hope, and optimism of students. Moreover, their results showed that wisdom-therapy is effective on the psychological competence of high school students over time.

Sternberg (2004) states in his research that a wise person seeks to increase his metacognitive ability by identifying his existing limitations as well as his strengths and weaknesses, so by teaching wise thinking, students can learn how to approach important issues. Nejati Far et al. (2021) concluded that wisdom is a reliable predictor for academic vitality (students' ability to succeed in dealing with common life obstacles and problems) and psychological well-being of gifted students and wise students have higher academic vitality and psychological well-being. Wisdom develops when students engage in, reflect on, synthesize, and apply the lessons they learn in and out of the classroom and throughout their lives (Green & Brown, 2009).

According to the definitions of personal and general wisdom and their differences, Kord Noghabi (2021) presented the concept of wisdom-therapy and its techniques, which can be carried out in two ways; personal and general. In the definition, wisdom therapy is the use of reasoning and intelligence and the use of consciousness in order to analyze and interpret internal and external affairs in the shadow of high human values. The correct use of the mind and the correct and error-free application of thinking and cognition is the method of wisdom therapy, and its purpose is to review the values of the clients to solve emotional problems and increase wisdom and the ability to reason. Wisdom-therapy is a goal-oriented and value-oriented therapy.

Considering general wisdom therapy, most people have used religion since the distant past to heal their pains, and religious scholars have suggested various ways to reduce problems such as guilt, sadness, anger, etc. Along with religion, philosophy, literature and art have been engaged in healing and they have even used in these areas as obstacles that prevent people from wrong actions such as violence, lying, and crime. Therefore, a person can take help from these guidelines and use them for therapeutic purposes. By using general wisdom-therapy, the client knows what life is and what its values are. But it is very likely that these lessons remain at the same level and do not enter the deeper layers of the person's personality; thus, the next important and difficult step is to apply the lessons learned in real life. A person learns many lessons from his personal life during three

stages: a) experience recovery, b) experience revision, and c) experience reconstruction, which if used for therapeutic changes, it is called personal wisdom-therapy. Techniques used in personal wisdom-therapy include: flower and stone techniques, thematic charts of life, eternal repetition of life, chapters of life book, key life scenes, next chapter of life, and studying life challenges. On the other hand, general wisdom therapy includes teaching everything that exist in a general form as the knowledge, science, religion, philosophy, and art, and are recommended by scientific, philosophical, spiritual, and social sages. However, despite the urgent need for more wisdom in today's society (Broya & Ardelt, 2018; Lee et al., 2013), wisdom has become a neglected part of education.

In accordance with what was discussed above and despite the importance of academic procrastination and wisdom-therapy (Bergzema & Ardelt, 2012; Broya &Ardelt, 2018; Kord nougabi, 2020, 2021), so far, no study has investigated the possible effect of wisdom-therapy (personal and general) on reducing students' academic procrastination, especially in the elementary school. Therefore, based on this, the current research sought to answer the following question:

- Does general and personal wisdom-therapy have an effect on students' academic procrastination?

## Materials and Methods

### *Design of the Study*

The present study is applied in terms of purpose and adopted a quasi-experimental method with a pre-test/post-test design and a control group in a student community.

### *Participants*

To select the statistical population and ultimately select the sample, one of the schools in Songhor Kolyaei County was referred to, and after obtaining permission and coordinating with the school principal, the statistical population included all the students of a girls' elementary school named Pardis 2 (230 students in the senior elementary level including the fourth, fifth, and sixth grades).

The sample in this study consisted of 51 female students(Approximately, 20-25% of adult men and women living around the world are indulged in chronic procrastination in various domains like academic, social relationships, professional, and finance management (Balkis & Duru, 2007; Ferrari & Díaz-Morales, 2014) from grades 4, 5, and 6 at Pardis 2 Elementary School in Songhor Kolyaei County, with an approximate age range of 9 to 12 years, who exhibited procrastination in completing school assignments. These students were selected through simple random sampling from a population of 230 eligible students and then randomly assigned to two experimental groups: Group A and Group B, and a control group (each with 17 students). Initially, all the students were

taught essay writing and its three stages. Based on this training, the students were given a staged assignment to submit in three phases on predetermined dates. From the first day after the assignment was given, each student's name and the date of assignment submission were recorded. After the deadline passed, the number of days each student was late in each stage was calculated. Students who ranked in the top 25% of late submissions among all students were identified as procrastinators. These students were then randomly assigned to Groups A, B, and the control group. After sample selection, general wisdom therapy was provided to Group A, and personalized wisdom therapy was administered to Group B, while the control group received no therapy. After completing the training sessions, all groups completed the same three-stage assignment as a post-test.

The content validity of the observational procrastination measurement tool was evaluated using the Content Validity Ratio (CVR) and Content Validity Index (CVI). For this purpose, 9 experts in psychology and psychometrics reviewed the items. The results showed that the main item had a CVR of .78, indicating that most experts considered it essential, and thus it is content valid (Lawshe, 1975). Additionally, the item-level CVI (I-CVI) was .89 and the scale-level CVI (S-CVI) was also .89, demonstrating clarity, relevance, and adequate content coverage of the tool (Waltz & Bausell, 1981). These findings suggest that the tool can be used to assess observational procrastination with acceptable content validity.

It should be noted that the scoring in this study to identify students who were procrastinating was such that the student received a score of 0 to 3 based on the number of steps in completing and submitting the task (In this study, receiving a higher score means completing the tasks on time and less procrastination).

### *Instruments*

#### Academic Procrastination

In this study, academic procrastination was measured using a three-stage essay writing task designed by the researchers. This tool served as a behavioral observational measure that directly assessed students' delays in completing and submitting assigned tasks. The assignment consisted of three stages of essay writing, each with a predetermined submission date. Essay topics were designed to encourage independent thinking, planning, and structured writing appropriate for elementary students. Students were required to submit each stage of the assignment on the scheduled date. From the first day of the assignment, the actual submission date for each student and each stage was recorded. After the final deadline, the number of days delayed in each stage was calculated. The total number of days delayed across all three stages was used as the behavioral index of academic procrastination. Students who ranked in the top 25% in terms of total delay

among the entire student population were identified as procrastinators and included in the intervention phase (wisdom therapy).

## Wisdom-therapy

After identifying the students with high levels of academic procrastination, they were randomly assigned to three groups: Group A, Group B, and a control group. Following the sampling process, Group A received general wisdom therapy, which included six structured sessions lasting 60 minutes each. The intervention for this group followed the general wisdom therapy protocol outlined in Table 1, based on the methods described in Wisdom Therapy by Kord noqabi (2021).

**Table 1. Description of General Wisdom-Therapy Sessions (Group A)**

| NO. of Session | Description Of General Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| **1** | Getting to know each other, stating the rules and goals of the program, being active in discussions, implementation conditions and duration of the course | The student should get to know the purpose of the class and get to know the teacher. | Providing definitions of procrastination and its forms for students | Speech and question and answer | PowerPoint | The school IT class | The researcher | 60 |
| **2** | Storytelling for students with the concept of procrastination and its consequences and students' discussion and dialogue about the subject of the story and conclusions and providing solutions to avoid such consequences by the students 3themselves. | The student can express the consequences of the character's procrastination. | A story from Molavi about procrastination and procrastination | Speech and question and answer | PowerPoint & Class blackboard | The school IT class | The researcher | 60 |

| NO. of Session | Description Of General Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| **3** | Playing a cartoon on the topic of procrastination for 12 minutes and discussing it and examining the characters of procrastination in the cartoon, and finally concluding and presenting a solution by the students. | The student can express the result of procrastination and provide a solution to avoid it. | Playing a cartoon about procrastination | a show, Speech, question and answer | Smart board and Video projector | The school IT class | The researcher | 60 |
| **4** | Reading some verses of the poems of great poets like Saadi with the theme of procrastination and discussing it. | The student can express the meaning of the verses read and recognize examples of procrastination in them. | A few verses from the poems of great poets like Saadi with the theme of procrastination | Speech , question and answer | PowerPoint and class blackboard | The school IT class | The researcher | 60 |
| **5** | The students are asked to introduce people who are procrastinating and disciplined in their lives, and they should place it in a continuum where on one side of those candidates who are procrastinating in their lives and on the other | The student can tell the difference between lazy and disciplined people. and Identify whether he/she is a lazy person or a self-disciplined person. | Mention examples of lazy and disciplined people | Speech and question and answer | Class blackboard | The school IT class | The researcher | 60 |

| NO. of Session | Description Of General Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| | side are those candidates who are disciplined in their lives. And the person determines his position on the continuum according to the current conditions of his/her life. After that, the characteristics of these people are discussed. | | | | | | | |
| **6** | Telling some hadiths from the elders of Islam about procrastination and discussion with the participation of students. Summarizing the contents and general conclusions of the topics raised in the class | The student should get acquainted with the sayings and hadiths of the elders of Islam regarding procrastination. | Hadiths from the elders of Islam | Speech and question and answer | PowerPoint and class blackboard | The school IT class | The researcher | 60 |

In contrast, Group B received personal wisdom therapy, also delivered in six 60-minute sessions. This intervention was designed according to the personal wisdom therapy framework presented in Wisdom Therapy, and its session content is detailed in Table 2.

**Table 2. Description of Personal Wisdom-Therapy Sessions (Group B)**

| NO. of Session | Description Of Personal Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| **1** | Getting to know each other, stating the rules and goals of the program, being active in discussions, implementation conditions and duration of the course. The concept of procrastination and its effect on life is explained to the students. | The student should get to know the purpose of the class and get to know the teacher | Providing definitions of procrastination and its forms for students | Speech, question and answer | Laptop and PowerPoint | The school IT class | The researcher | 60 |
| **2** | Descriptions of peak experiences or high points in life are presented in simple language, and students are asked to describe their peak experience and answer the five questions posed in the technique. | The student remembered the situations in which she felt positive due to being disciplined and not slacking off. | Content and content and tips about peak experience and some examples in this field. | Speech, question and answer | Laptop and PowerPoint | The school IT class | The researcher | 60 |
| **3** | Descriptions of low experiences or low points in life are presented and students are asked to describe their | The student remembered the situations she had because of procrastination, negative feelings and anxiety. | Content and content and tips about little experience and giving some examples in this field. | Speech, question and answer | Laptop and PowerPoint | The school IT class | The researcher | 60 |

| NO. of Session | Description Of Personal Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| | low experience and answer the five questions posed in this technique. . | | | | | | | |
| **4** | The researcher asks the students to describe an event in their life in which they behaved wisely and to answer the five questions raised in this technique. | The student should know the result of being disciplined and not slacking off in her work. | Students' memories | question and answer | blackboard | The school IT class | The researcher | 60 |
| **5** | The researcher asks the students to describe a positive memory from their childhood and first years of elementary school and answer the five questions raised in this technique. | The student should describe the experience she had in the field of academic procrastination and remember the result. | Students' memories | question and answer | blackboard | The school IT class | The researcher | 60 |
| **6** | In the last session, the researcher asks the students to think about the positive and negative memories in their lives, use their positive memories and | The student can be aware of the situations in which she may be careless and avoid it. | A summary of the materials mentioned in the previous meetings and a review of solutions and suggestions | question and answer | blackboard | The school IT class | The researcher | 60 |

| NO. of Session | Description Of Personal Wisdom-Therapy Sessions | The Goal | Content | Method | Instrument | Location | Teacher | Time |
|---|---|---|---|---|---|---|---|---|
| | experiences, enjoy their life and education, be eager to learn more, and be wise. Avoid procrastination. | | | | | | | |

Both intervention protocols were implemented by one of the researchers while the control group did not receive any form of wisdom therapy or related training during the study period.

## Results

To assess the normality of the data, Kolmogorov-Smirnov was used.

**Table 3. Kolmogorov-Smirnov Test for Assessing the Normality of Procrastination Scores Distribution in the Experimental and Control Groups**

| Variables | Group | Pre-test | | Post-test | |
|---|---|---|---|---|---|
| | | Z | Sig | Z | Sig |
| Academic Procrastination | General Wisdom Therapy | 0.112 | 0.200 | 0.145 | 0.200 |
| | Personal Wisdom Therapy | 0.211 | 0.091 | 0.192 | 0.181 |
| | Control | 0.132 | 0.200 | 0.238 | 0.68 |

As shown in Table 3, the significance levels associated with the Kolmogorov-Smirnov test for the distribution of procrastination scores in both the pre-test and post-test phases across the experimental and control groups exceed the .05 threshold ($p > .05$). This indicates that the data for the dependent variable are normally distributed. Consequently, the assumptions for applying parametric tests are met, and these tests can be appropriately used to evaluate the research hypotheses.

**Table 4. Descriptive Statistics of Academic Procrastination Scores in the Investigated Groups**

| | Test of Groups | Pretest | | | Posttest | | |
|---|---|---|---|---|---|---|---|
| | | F | Mean | SD | F | Mean | SD |
| Academic Procrastination | General Wisdom Therapy | 17 | 0.23 | 0.43 | 17 | 1.71 | 1.21 |
| | Personal Wisdom Therapy | 14 | 0.24 | 0.45 | 17 | 2.47 | 0.87 |
| | Control | 17 | 0.27 | 0.36 | 17 | 0.29 | 0.46 |

The information in Table 4 shows that the average scores of procrastination in the pre-test and post-test of the control group are .27 and .29 respectively. The average procrastination scores in the post-test of the general wisdom-therapy group compared to the pre-test of this group increased from .23 to 1.71. The average procrastination scores in the post-test of the personal wisdom-therapy group also increased compared to the pre-test of this group and reached from .24 to 2.47 (it should be noted that a higher score means lower procrastination).

**Table 5. Analysis of Variance to Examine the Homogeneity of the Slopes of the Regression Lines of Academic Procrastination in the Experimental and Control Groups**

| Source Of Change | Sum of Squares | Degree of Freedom | Mean Squares | F-Value | Sig. |
|---|---|---|---|---|---|
| General wisdom therapy group, pre-test for procrastination | 7.21 | 2 & 31 | 3.60 | 3.03 | 0.062 |
| Personal wisdom therapy group pre-test for procrastination | 6.14 | 2 & 31 | 3.07 | 2.02 | 0.152 |

The data in Table 5 show that the significance level of the F value obtained for the difference in the slopes of the regression lines of the pre-test and post-test procrastination scores between the experimental and control groups is higher than .05, so the slopes of the regression lines of these scores do not differ significantly between the two groups, and the assumption of homogeneity of the regression slopes in relation to the variables is confirmed.

**Table 6. Results of Levene's Test to Examine the Homogeneity of Procrastination Variance**

| Dependent variable | F value | DF1 | DF2 | Sig. |
|---|---|---|---|---|
| **Procrastination** | 1.44 | 2 | 48 | 0.246 |

As shown in Table 6, Levene’s test confirmed that the variances of procrastination scores did not differ significantly between groups (p >.05). Thus, the assumption of homogeneity of variance was satisfied.

**Table 7. The Results of One-Way Analysis of Covariance on Post-Test Scores of Procrastination By Controlling Pre-Test Scores (Personal Wisdom-Therapy And Control Groups)**

| Variable | | Sum of Squares | Degree of Freedom | Mean of Squares | F value | Level of Significance | Squares |
|---|---|---|---|---|---|---|---|
| **Academic procrastination** | Group | 1.64 | 1 | 1.64 | 3.65 | 0.065 | 0.10 |
| | pretest | 38.11 | 1 | 38.11 | 84.41 | 0.001 | 0.73 |
| | error | 13.99 | 31 | 0.45 | | | |

The results of Table 7 show that the effect of the pre-test was not significant and its choice as a covariate variable was not effective. The group effect is significant (p <.01, F = 84.41), which means that personal wisdom-therapy has a significant effect on reducing students' academic procrastination, and according to these results, the first hypothesis of the research is confirmed, and according to The eta square of this effect is 73%.

**Table 8. The Results of One-Way Analysis of Covariance on Post-Test Scores of Procrastination by Controlling Pre-Test Scores (General Wisdom-Therapy and Control Groups)**

| Variable | Factor | Sum of Squares | Degree of Freedom | Mean of Squares | F Value | Sig. | Squares |
|---|---|---|---|---|---|---|---|
| **Academic Procrastination** | Group pretest | 4.08 | 1 | 4.08 | 5.51 | 0.25 | 0.15 |
| | | 16.94 | 1 | 16.94 | 22.86 | 0.001 | 0.42 |
| | error | 22.97 | 31 | 0.74 | | | |

The results of the Table show that the effect of the pre-test was significant and its selection as a covariate variable was effective. The effect of the group is also significant (p<.01, F = 22.86), which means that general wisdom-therapy has a significant effect on reducing academic procrastination of students, and according to these results, the second hypothesis of the research is confirmed, and according to The eta square of this effect is 42%.

**Table 9. Adjusted Mean of Work Procrastination in Personal and General Wisdom-Therapy Groups and the Control Group**

| Independent Variable | Mean | Standard Variation | Lower Limit | Upper Limit |
|---|---|---|---|---|
| **General Wisdom Therapy** | 1.71 | 0.20 | 1.30 | 2.11 |
| **Personal Wisdom Therapy** | 2.47 | 0.20 | 2.06 | 2.87 |
| **Control** | 0.29 | 0.20 | -0.11 | 0.69 |

Table 9 shows the adjusted mean scores of students' academic procrastination in the experimental and control groups.

**Table 10. Post-Test to Investigate the Difference between Personal and General Wisdom-Therapy Methods in the Post-Test of Academic Procrastination**

| Independent Variable | Base group | Experimental Group | Mean Difference | Standard Deviation | Sig. |
|---|---|---|---|---|---|
| **Academic Procrastination** | Personal wisdom therapy | general wisdom therapy | 0.765* | 0.28 | 0.030 |
| **Academic Procrastination** | Personal wisdom therapy | control | 2.17* | 0.28 | 0.001 |
| **Academic Procrastination** | general wisdom therapy | control | 1.41 | 0.28 | 0.001 |

The results of Table 10 showed that the difference between the average academic procrastination in two methods of personal and general wisdom-therapy is significant (p<.05). According to the difference in the average work procrastination in the two groups (the average work procrastination in the general wisdom-therapy group was equal to 1.70 while in the personal wisdom-therapy group, it was equal to 2.47 and the difference in the averages was significant at the .05 level), it was found that the effect of the personal wisdom-therapy method is more effective in reducing students' academic procrastination than that of the general wisdom-therapy method. Comparison of two wisdom-therapy methods with the control group also showed that both methods are effective in reducing work procrastination (p<.01).

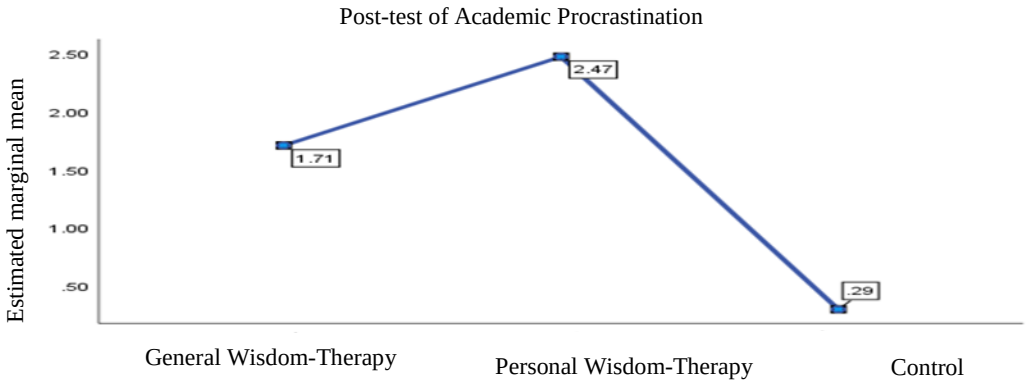


**Figure 1. Profile of the Effectiveness of Microtherapy Methods on Students' Academic Procrastination**

## Discussion

The results of the study revealed that the method of personal wisdom-therapy has a statistically positive and significant effect in reducing the procrastination of students. The results of this research are partially in line with the findings of Kord noghabi and Asoudeh (2023), Ringler (2021) and Ebrahimi Dabagh and Zafarheidarpour (2021). Kord noghabi and Asoudeh (2023) investigated the effect of wisdom-therapy on teachers' occupational stress and used the technique of key scenes of life technique, which is one of the techniques of personal wisdom-therapy for teachers of elementary schools. The results of the research showed that wisdom- therapy has reduced the occupational stress of teachers. Ebrahimi Dabagh and Zafarheidarpour (2021) also showed that teaching wisdom has improved the level of students' learning, and students who used wisdom-learning methods obtained better results than students who benefited from traditional learning.

In explaining this research finding, it seems that the phenomenon of procrastination and its process should be mentioned first. Psychologists believe that people procrastinate because of irrational and negative thoughts and beliefs and unrealistic expectations about the conditions and results of activities. Negative beliefs about one's own cognitive competence can be another cause of procrastination. People with high procrastination suffer from lack of personal control and low self-efficacy. From this point of view, the main reason for procrastination is the fear and anxiety related to failure, which is a combination of inefficient beliefs such as incompatible perfectionism, performance evaluation anxiety, along with self-efficacy and low self-esteem. In this state, a person spends most of his time worrying about exams (Choi & Choi, 2005). Currently, various methods and techniques are taught in personal wisdom-therapy based on the opinion of Kord noghabi (2022). In personal wisdom-therapy, influential experiences, which are the basic challenges of life, are remembered. They create major changes in a person's priorities and views. In this research, events such as failure and difficult challenges in which students have problems were considered.

The second finding showed that the method of general wisdom-therapy has a statistically positive and significant effect on reducing the procrastination of students which is in agreement with the findings of Danesh-Payeh et al. (2022), Ardelt (2021), and Supiyati et al. (2007). In the explanation of this finding based on Steel's (2007) point of view, it can be mentioned that procrastination is usually thought of as an irrational desire to delay required tasks despite the negative effects of this delay on the individual. Academic procrastination also means not taking action, delaying or postponing academic activities. Procrastination is only a behavioral reflection, while personality traits, cognitive and motivational processes, as well as contextual conditions are deep motivations for procrastination. Procrastination can be defined as a purposeful and unreasonable delay in order to miss the appropriate time to complete a task. According to Steel (2007) and Klingsieck (2013), the procrastination process of students is influenced by personality

traits, internal motivation, and the characteristics of the external environment, and a person may be affected by any of these characteristics to postpone the task.

In explaining the effect of general wisdom-therapy on students' procrastination, Kord noghabi (2022) asserted that general wisdom therapy is rooted in the wisdom paradigm of Berlin and the teachings of Buddhism. According to this point of view, most people have used philosophy, literature, art and religion to reduce their problems since the distant past, and sages, philosophers and religious scholars have different ways to reduce problems such as guilt, sadness, and anger. Therefore, public wisdom can use these fields with the help of therapeutic goals (Kord noghabi, 2021). By using general wisdom-therapy, a person knows what life is and what its values are (Staudinger & Gluck, 2011).

Furthermore, the results of the research question showed that the personal wisdom-therapy method is more effective on reducing academic procrastination of students than the general wisdom-therapy method. According to Hen and Goroshit (2018), procrastination is a self-regulatory failure that is associated with a variety of personal and situational determinants. Research also shows that task characteristics (such as unclear instructions, timing of rewards and punishments, as well as task aversion), personality aspects (such as the five-factor model, motivation and cognition), and environmental factors (such as temptation, incentives, and accountability) are of the main factors of procrastination (Vai Wypych et al., 2018).

To probe the reason why personal wisdom-therapy is more effective than general wisdom-therapy in reducing procrastination, we should first point out the definitions and distinction of general and personal wisdom. Staudinger and Gluck (2011) divided “wisdom” into “personal wisdom” and “public wisdom” based on whether they rely on first-person or third-person ontology. Personal wisdom is a person's insight into his life. That is, the wisdom that a person shows when facing the incidents and problems in his life, and general wisdom is the wisdom that a person shows when dealing with the general problems in the lives of others. Accordingly, people are wiser than themselves when considering the interpersonal conflicts of others (general wisdom) (Grossman & Cross, 2014). Some people are also good at solving their own problems (personal wisdom), but they are not very successful in providing solutions to others. However, it can be understood that personal wisdom is used to solve personal problems and general wisdom is used to solve general problems (Wang & Zheng, 2014).

In compiling personal and general wisdom-therapy, we should take into account the basics of these two aspects of wisdom, as Staudinger and Gluck (2011) pointed out, general wisdom is derived from the Berlin paradigm and Sternberg's balance theory, and personal wisdom is based on the works of Erikson and Ardelt. General wisdom mostly includes the general issues of life and based on the opinion of the wise and elders, this knowledge and judgment is used in solving life issues. On the other hand, personal wisdom involves reflection, thought, and personal emotions

and plays a prominent role in self-knowledge and self-awareness (Ardelt, 2021). According to many studies (Sirois &Pychyl, 2013; Vaipich et al., 2018), academic procrastination is a kind of deficiency in self-regulation and control of one's emotions and thoughts, and personal wisdom is also based on cognitive and emotional aspects (Ardelt, 2003, 2011). Therefore, it can be expected that the effect of personal wisdom on academic procrastination is greater than that of general wisdom.

## Conclusion

In general, it can be mentioned that two methods of wisdom-therapy were effective in reducing students' academic procrastination. According to the results of Yang (2008) and Ardelt (2011), wisdom can affect knowledge, personality traits, and interests, and this positive effect is important in gaining enthusiasm in doing academic activities and plays a role in reducing procrastination. In the method of general wisdom-therapy, stories, anecdotes, and poems were used to identify the signs of procrastination and discuss the results, and the study of procrastinators and regulars was also considered. The students themselves were placed in the continuum between procrastination and they imagined regularity and compare themselves in this regard and learned from the words of elders. In personal wisdom-therapy, students were asked to remember their good and bad experiences as well as milestones in their lives. By thinking about these things, the students' perspective deepens, and by thinking and remembering positive experiences, especially positive academic experiences, students probably gain more motivation and enthusiasm, and higher motivation plays an important role in accomplishing homework leading to reducing procrastination.

This study faced several limitations, including the limited research background on microtherapy, the absence of a follow-up phase due to time constraints, and the small sample size, which limits generalizability. Future studies should employ larger and more diverse samples, examine microtherapy at different levels of academic procrastination, and include follow-up phases to evaluate the sustainability of outcomes. Complementary methods, such as teacher and parent interviews, may also improve the identification of procrastinators.

The findings highlight practical implications: wisdom-based approaches can be effective in reducing academic procrastination and should be integrated into educational and counseling practices. Schools are encouraged to foster higher-order thinking, especially wisdom, in their curricula. In particular, personal wisdom therapy appears most promising, suggesting that teachers should engage students in reflective dialogue, challenge their beliefs, and expose them to philosophical and literary perspectives.

## Conflict of interest

The authors declare no conflicts of interest.

## References


Ardelt, M., & Bruya, B. (2021). Three-dimensional wisdom and perceived stress among college students. *Journal of Adult Development, 28* (3). https://doi.org/10.1007/s10804-020-09358-w

Aremu, A. O., Williams, T. M., & Adesina, F. T. (2011). Influence of academic procrastination and personality types on academic achievement and efficacy of school adolescents in Ibadan. *IFE PsychologIA, 19*(1), 93–113. https://doi.org/10.4314/ifep.v19i1.64591

Balkis, M., & Duru, E. (2007). The evaluation of the major characteristics and aspects of the procrastination in the framework of psychological counseling and guidance. *Educational Sciences: Theory & Practice*, *7*(1), 376-385. https://www.researchgate.net/publication/234705206

Balkis, M., & Duro, E. (2009). Prevalence academic procrastination behavior among pre-service teachers, and its relationship white demographics and individual preferences. *Journal of Theory and Practice in Education*, 5, 18-3. https://www.researchgate.net/publication/26581257

Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic pragmatic to orchestrate mind and virtue toward excellence. *American Psychologist*, *55*(1), 122-136. https://doi.org/10.1037/0003-066X.55.1.122

Bergsma, A., & Ardelt, M. (2012). Self-reported wisdom and happiness. An empirical investigation. *Journal of Happiness Studies*, *13*(3), 481-499. https://doi.org/10.1007/s10902-011-9275-5

Bruya, B., & Ardelt, M. (2018). Wisdom can be taught: A proof-of-concept study for fostering wisdom in the classroom. *Learning and Instruction*, *58*(3), 106-114. https://doi.org/10.1016/j.learninstruc.2018.05.001

Case, P., & Gosling, J. (2007). Wisdom of the moment: pre-modern perspectives on organizational action. *Social Epistemology*, *21*(2), 87–111. https://doi.org/10.1080/02691720701393426

Chu, A. H. C., & Choi, J.N. (2005). Rethinking procrastination: Positive effects of ؛ active" procrastination behavior on attitudes and performance. *J. Soc. Psychol*, *145*, 245–264. https://psycnet.apa.org/doi/10.3200/SOCP.145.3.245-264

Csikszentmihalyi, M., & Rathunde, K. (1990). The psychology of wisdom: An evolutionary interpretation. In R. J. Sternberg (Ed.), Wisdom: Its nature, origins, and development (pp. 25-51). CUP.

Daneshpaye, M., Dartaj, F., & Mazozaz, A. (2022). Explaining the model of psychological well-being based on wisdom with the mediation of loneliness in women. *Women's Studies Sociological and Psychological*, *20*(3), 84-109. https://doi.org/10.22051/JWSPS.2022.39040.2559

Ebrahimi Dabbagh, M., & Zafar Heydarpour, M. (2021). *A review on the effects of wisdom learning on the level of learning*.https://civilica.com/doc/1661728

Ellis, A., & Nall, W. (2017). The psychology book of procrastination: Overcoming procrastination. OUP.

Ferrari, J. R, (1992). Procrastinators and perfect behavior: An exploratory factor analysis of self-presentation, self-awareness, and self-handicapping components. *Journal of Research in Personality*, *26*, 75-84. https://doi.org/10.1017/S113874160000634X

Ferrari, J. R., & Díaz-Morales, J. F. (2014). Procrastination and mental health coping: A brief report related to students. *Individual Differences Research*, *12*(1), 8-11. https://www.researchgate.net/publication/256475556

Greene, J. A., & Brown, S. C. (2009). The wisdom development scale: Further validity investigation. *Aging and Human Development*, *68* (4), 289-320. DOI:10.2190/AG.68.4.b

Grimm, S. R. (2015). Wisdom. *Australasian Journal of Philosophy*, 93(1), 139-154. DOI: http://dx.doi.org/10.18290/rf.2018.66.1-4

Grossmann, I., & Kross, E. (2014). Exploring Solomon's paradox: Self-distancing eliminates the self-other asymmetry in wise reasoning about close relationships in younger and older adults. *Psychological Science*, *25*, 1571–1580. DOI: 10.1177/0956797614535400

Grossmann, I., Weststrate, N. M., Ardelt, M., Brienza, J. P., Dong, M., Ferrari, M., & Vervaeke, J. (2020). The science of wisdom in a polarized world: Knowns and unknowns. *Psychological Inquiry*, *31*(2), 103-133. https://doi.org/10.1080/1047840X.2020.1750917

Hen, M., & Goroshit, M. (2018). General and life-domain procrastination in highly educated adults in Israel. *Front. Psychol*., 9, 1173 .https://doi.org/10.3389/fpsyg.2018.01173

Jaradat, A.M. (2004). *Test anxiety in Jordanian students: Measurement, correlates and treatment*. University of Marburg.

Klingsieck, K. B. (2013). Procrastination: when good things don't come to those who wait. *Eur. Psychol.*, *18*, 24–34. https://psycnet.apa.org/doi/10.1027/1016-9040/a000138

Kord noghabi, R. (2018), *Wisdom Psychology*. Arjmand.

Kord noghabi, R. (2021), *wisdom-therapy*. Faravan.

Kord noghabi, R., & Asoudeh, M. (2023). The effect of wisdom therapy on teachers job stress. *Theory and Practice in Teachers Education*, *8*(14), 270-253. https://doi.org/20.1001.1.26457156.1401.8.14.12.1

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563–575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Lee, J.C., Chen, C.L., & Xie, S.H. (2013). The influence of school organizational health and occupational burnout on self-perceived health status of primary school teachers. *Social and Behavioral Sciences*, *116*(2), 985-989. https://doi.org/10.1016/j.sbspro.2014.01.332

McCown, W., Johnson, J., & Petzel, T. (1989). Procrastination a principal components analysis. *Journal and Individual Differences*, 10,197-202.

Neenan, M. (2008). Tackling procrastination: An REBT perspective for coaches. *J Rat-Emo Cognitive-Behavior*, *26*, 53-62. https://doi:10.1007/s10942-007-0074-1

Noftle, E. E., Schnitker, S. A., & Robins, R. W. (2011). Character and personality: Connections between positive psychology and personality psychology. In K. M. Sheldon, T. B. Kashdan, & M. F. Steger (Eds.), *Designing positive psychology: Taking stock and moving forward* (pp. 207–227). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195373585.003.0014

Özer, B. U., Demir, A., & Ferrari, J. R. (2009). Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons. *The Journal of Social Psychology*, *149*(2), 241–257. https://doi.org/10.3200/SOCP.149.2.241-257

Penley, J. A., & Tomaka, J. (2002). Associations among the Big five, emotional responses, and coping with acute stress. *Personality and Individual Differences*, *32*, 1215-1228. https://doi.org/10.1016/S0191-8869(01)00087-3

Ringler, N. (2021). Know thyself: Mindfulness partially explains the relationship between personal wisdom and meaning making. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*. Advance online publication. https://doi.org/10.1007/s12144-021-01853-x

Schouwenburg, H. C. (2004). Procrastination in Academic Settings: General Introduction. In H. C. Schouwenburg, C. H. Lay, T. A. Pychyl, & J. R. Ferrari (Eds.), *Counseling the procrastinator in academic settings* (pp. 3–17). American Psychological Association. https://doi.org/10.1037/10808-001

Senécal, C., Koestner, R., & Vallerand, R.J. (1995). Self-regulation and academic procrastination. *Journal of Social Psychology*, *135*, 607-61. https://selfdeterminationtheory.org/SDT/documents/1995

Shahniyeilagh, M., Salamati, A., Mehrabizadeh, H., & Haghighi, J. (2016). Investigation of the prevalence of procrastination and the effect of cognitive-behavioral therapy and behavior management methods on its reduction in high school students of Ahvaz city. *Journal of Educational Sciences and Psychology of Shahid Chamran University of Ahvaz* (pp. 1-30).

Sirois, F., & Pychyl, T. (٢٠١٣). Procrastination and the priority of short-term mood regulation: consequences for future self. Soc. *Personal. Psychol., 7,* ١١٥–١٢٧. https://psycnet.apa.org/doi/10.1111/spc3.12011

Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychol.Bull*, *133*, 65–94 .https://doi.org/10.1037/0033-2909.133.1.65

Sternberg, R. J. (2004). Words to the wise about wisdom? A commentary on Ardelt's critique of Baltes. *Human Development*, *47* , 286–289. https://doi.org/10.1007/S12144-022-02816-6.

Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research :Commonalities and differences in a growing field. *Annual Review of Psychology*, *62*, 215–241. DOI: 10.1146/annurev.psych.121208.131659

Supiyati, S., Halqi, M., Waluyo, E., & Rasidi, A. (2023). Development of collaborative based inquiry learning tools using local wisdom context to improve students metacognitive. *Jurnal Elemen*, *9*(1), 246-255. DOI:10.29408/jel.v9i1.6969

Waltz, C. F., & Bausell, R. B. (1981). *Nursing research: Design, statistics, and computer analysis*. F. A. Davis Company.

Wang, F. Y., Yan, L. S., & Zheng, H. (2019). *A new look of educational psychology* (5th Ed.). Jinan University Press.

Webster, J. D. (2003). An exploratory analysis of a self-assessed wisdom scale. *Journal of Adult Development*, *10*(1), 13-22. https://doi.org/10.1023/A:1020782619051

Wypych, M., Matuszewski, J., & Dragan, W. Ł. (2018). Roles of impulsivity, motivation, and emotion regulation in procrastination: Path analysis and comparison between students and non-students. *Front. Psychol*., *9*, 891 https://doi.org/10.3389/fpsyg.2018.00891

Yang, S. Y. (2008). A process view of wisdom. *Journal of Adult Development*, *15*(2), 62–75. DOI:10.1007/s10804-008-9037-8