

Development of a Counseling Package Based on the Lived Experiences of Middle School Girls for Preventing Academic Procrastination

Kiyana. Karevan Brojerdi¹, Mohammad Mahdi. Shariat Bagheri^{2*}, Keyvan. Salehi³

¹ PhD student in Educational Psychology, Department of Clinical-Educational Psychology, Central Tehran Branch, Islamic Azad University, Tehran, Iran

² Assistant Professor, Department of Clinical-Education Psychology, central Tehran Branch, Islamic Azad University, Tehran, Iran

³ Associate Professor, Faculty of Psychology and Education, University of Tehran, Tehran, Iran

* Corresponding author email address: m.shariatbagheri@iauctb.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Karevan Brojerdi, K., Shariat Bagheri, M. M., & Salehi, K. (2024). Development of a Counseling Package Based on the Lived Experiences of Middle School Girls for Preventing Academic Procrastination. *Journal of Assessment and Research in Applied Counseling*, 6(3), 183-198.
<http://dx.doi.org/10.61838/kman.jarac.6.3.21>



© 2024 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: Academic procrastination is a common issue among students that significantly impacts their academic performance and mental health. This study aims to develop a counseling package based on the lived experiences of middle school girls to reduce academic procrastination. Considering the multifaceted nature of procrastination, this study examines cognitive, behavioral, emotional, relational, and motivational dimensions to create an effective intervention.

Methods and Materials: This qualitative study utilized a phenomenological approach to explore the lived experiences of middle school girls with academic procrastination. Participants were purposefully selected from schools in District 5 of Tehran during the 2023-2024 academic year. Data were collected through semi-structured interviews and analyzed using Colaizzi's seven-step method to extract meaningful statements, formulate their meanings, and identify themes.

Results: Data analysis revealed five main dimensions in the students' lived experiences of academic procrastination: cognitive, behavioral, emotional, relational, and motivational. The cognitive dimension includes errors in understanding concepts, perceptions of the difficulty of materials, the ability to focus and pay attention, and personal attitudes and beliefs about education. The behavioral dimension encompasses avoidance behaviors, sleep and rest patterns, leisure activities, use of technology and social networks, learning styles, and academic planning. The emotional dimension involves feelings related to academic pressure, experiences of failure and frustration, motivation and enthusiasm for learning, and levels of academic stress and anxiety. The relational dimension refers to interactions with friends and teachers, family relationships, school culture and classroom environment, and the impact of virtual communications. Finally, the motivational dimension includes academic goals, intrinsic and extrinsic rewards, self-efficacy beliefs, individual and family

values, previous experiences of success and failure, and the importance of education in future planning.

Conclusion: The developed counseling package consists of 12 sessions addressing each identified dimension. This program includes sessions on behavioral strategies (sleep, time management), cognitive techniques (error correction, focus enhancement), emotion management (stress reduction, motivation increase), and communication skills (effective interaction with peers, teachers, and family). This comprehensive approach is designed to equip students with the necessary skills to effectively combat academic procrastination.

Keywords: *Development of counseling package, academic procrastination, students' lived experiences, middle school.*

1. Introduction

Students, as the future builders of society, are considered a valuable group, and the educational period is one of the most important phases in their lives. Therefore, attention to their psychological and academic status, interests, and needs, as well as providing the necessary conditions for their constructive growth and development, is crucial (Tulu, 2017). In this regard, more than ever, the academic progress of students and the factors influencing it have gained the attention of education specialists. Examining the academic status of learners in various regions indicates a significant gap between expected outcomes, learning levels, and their academic progress. Numerous studies have shown that students' academic performance can explain a considerable percentage of their future progress (Soetanto et al., 2024; Sun, 2023).

One of the factors influencing students' academic performance is academic procrastination ((Sparfeldt & Schwabe, 2024; Xhakolli & Hamzallari, 2023), a common behavior in educational environments that can be considered a threat to their academic success. Academic procrastination occurs at all educational levels (Ragusa et al., 2023). Lee et al. (2020) argue that academic procrastination is one of the most prevalent problems in the educational field, which is increasing in the era of technology. It can have inappropriate and irreparable consequences by hindering progress and preventing goal achievement (Hong et al., 2021). Definitions of academic procrastination include the irrational tendency to delay academic tasks, often accompanied by anxiety, with a prominent example being the postponement of studying until the night before an exam, resulting in haste and anxiety, commonly observed among students. The delays seen in academic procrastination may stem from the late initiation of academic tasks and impulsive diversions during work (Wang et al., 2021). Research results indicate that such delays and diversions are associated with personality factors such as impulsivity, preference for short-term satisfaction,

low self-regulation, fatigue, and reduced energy (Hong et al., 2021; Ragusa et al., 2023). Many researchers believe that approximately 50 to 95 percent of students are prone to academic procrastination (Akbari Boorang et al., 2023; Hong et al., 2021; Sedighi Arfaee et al., 2021).

Academic procrastination in students is associated with negative outcomes such as low school grades, academic stress, test anxiety, social anxiety, reduced productivity and creativity, wasted time, feelings of guilt, and lack of social approval. These factors not only hinder academic progress but also negatively impact their quality of life (Sun, 2023; Xhakolli & Hamzallari, 2023). Academic procrastination is an educational experience with various cited reasons. Research indicates that procrastination can be a factor in poor academic performance (Abbasi et al., 2015; Assem et al., 2023; Azimi et al., 2017; Bong et al., 2014; Cassady & Johnson, 2002; Dehghani & Hekmatiyani Fard, 2020; Howell et al., 2006; Kağan et al., 2010; Kim & Seo, 2015; Kuftyak, 2022; Malatincová, 2015; Qian & Zhao, 2018; Ragusa et al., 2023; Salam & Astuti, 2023; Savari, 2013; Seif, 2016; Sun, 2023), rumination (Sedighi Arfaee et al., 2021), aversion to tasks and fear of failure (Joghataei et al., 2023; Solomon & Rothblum, 1984), anxiety and dependency (Abdolshahi & Mehdi Reza, 2019; Bong et al., 2014; Cassady & Johnson, 2002; Eisenbeck et al., 2019; Hashemi & Latifian 2014; Krispenz et al., 2019; Kuftyak, 2022; Ragusa et al., 2023; Saplavaska & Jerkunkova, 2018; Sedighi Arfaee et al., 2021; Solomon & Rothblum, 1984; Wang et al., 2021), and depression (Abdolshahi & Mehdi Reza, 2019; Eisenbeck et al., 2019; Ragusa et al., 2023; Sedighi Arfaee et al., 2021; Solomon & Rothblum, 1984).

A review of previous research by the researcher revealed numerous studies on developing structural models of academic procrastination based on emotional schemas with the mediating role of test anxiety (Hekmatiyani Fard, 2023), predicting academic procrastination based on social self-efficacy and perfectionism: the mediating role of achievement emotions (Akbari Boorang et al., 2023; Assem

et al., 2023; Batool, 2020; Cheng et al., 2023; Hossinpanah & Kazemianmoghadam, 2021; Krispenz et al., 2019; Kuftyak, 2022; Rasouli et al., 2019; Sedighi Arfaee et al., 2021; Sparfeldt & Schwabe, 2024), modeling academic procrastination based on maladaptive schemas and personality traits with the mediation of emotion regulation and self-determination (Baradaran & Ranjbar Noushari, 2022; Dehghani & Hekmatiyani Fard, 2020; Eisenbeck et al., 2019; Heshmati et al., 2018; Ragusa et al., 2023; Sedighi Arfaee et al., 2021), structural model of academic procrastination based on goal orientation and attribution styles: the mediating role of academic motivation (Abdolshahi & Mehdi Reza, 2019; Cheraghi & Yousefi, 2019; Dehghani & Hekmatiyani Fard, 2020; Gustavson & Miyake, 2017; Hosseini et al., 2020; Krispenz et al., 2019; Melgaard et al., 2022; Ragusa et al., 2023; Rasouli et al., 2019; Sedighi Arfaee et al., 2021; Tavakoli & Ebrahimi, 2020; Won & Yu, 2018; Xhakolli & Hamzallari, 2023), and developing a causal model of academic procrastination based on academic goal orientation with the mediating role of academic engagement and self-efficacy (Akbari Boorang et al., 2023; Bong et al., 2014; Moti et al., 2012; Seif, 2016). However, due to the lack of sufficient studies, the present study aims to develop a counseling package based on the lived experiences of middle school girls to prevent academic procrastination.

2. Methods and Materials

2.1. Study Design and Participants

The present study is a qualitative research aimed at exploring the lived experiences of middle school girls with academic procrastination and developing a counseling package based on these findings. A phenomenological method was employed as it is a suitable approach for understanding individuals' experiences, providing a deep exploration of the nature of lived experiences. This method aims to uncover the meaning of a phenomenon or concept from the perspective of a group of individuals. Researchers in phenomenological studies focus on understanding individuals' deep experiences to discover the meanings behind their actions. Participants in this study included all middle school girls studying in District 5 of Tehran during the 2023-2024 academic year. Sampling in this study was purposeful, with sample size determined by the saturation of data and repetition of information, indicating the adequacy of the sample size. Therefore, sampling continued until data saturation was achieved. Inclusion criteria were: being a

middle school student, absence of any psychiatric disorder requiring medication or psychotherapy as diagnosed by a psychiatrist or psychologist, physical health, living with both parents, willingness to participate in the study, and parental consent. The exclusion criterion was unwillingness to continue participating in the study.

2.2. Measures

2.2.1. Semi-Structured Interview

Semi-structured Interviews: Data were collected using semi-structured interviews. This method includes a set of structured questions followed by additional questions for deeper exploration and information gathering, allowing interviewees to clearly express their views. It also enables the researcher to discuss research questions from different angles in a face-to-face dialogue. The interview process involved drafting questions based on research literature and consulting with supervisors, advisors, and psychology and education experts, followed by reaching a consensus on the final interview form. Interviews were prepared based on the finalized questions, and participants were asked to provide additional information if necessary. Participation was voluntary, and interviewees could skip any questions they were uncomfortable answering. All interviews were recorded, and notes were taken during and immediately after interviews. Summarizing participants' statements and asking for confirmation ensured the accurate understanding of their responses. After explaining the research topic and obtaining participants' consent, interviews were scheduled. Theoretical saturation was achieved after the 23rd interview, but to ensure validity, interviews continued until the 28th participant. Interviews were conducted in person with students at their schools, each lasting between 40 to 60 minutes. Sample interview questions included:

Is studying sufficiently attractive to you? If not, what factors contribute to this lack of attractiveness?

To what extent do teacher characteristics (such as teaching methods, inconsistency between teaching and assessment, linking disciplinary issues to academic matters, not consulting students in class affairs, and favoritism) influence the interest and motivation for academic activities?

Can you create a schedule for your academic and non-academic activities?

Describe your willpower to start and continue academic activities.

How aware are you of learning monitoring strategies, and do you use them (e.g., studying aloud or self-quizzing)?

Do you experience psychological pressure from being compared by teachers, leading to procrastination until the last minute?

Do you experience mental preoccupations such as mental comparisons, rumination, sleep disturbances, and overgeneralization?

Have you ever lacked motivation to do academic tasks due to being belittled or ignored by teachers?

Do you face parental control symbols like the pressure to achieve high grades and enforced subject choices, leading to procrastination?

Have you ever postponed a task or studying without any specific reason? Please explain.

2.3. Data analysis

After each interview, the content was meticulously transcribed word-for-word using Word software and subsequently analyzed. Colaizzi's descriptive method was used for data analysis, comprising the following seven steps:

Reading all protocols: To gain a general sense and familiarity with participants' concepts and views, their narratives (protocols) were carefully listened to and transcribed in Word.

Extracting significant statements: Each protocol was examined to identify and extract statements directly related to the research topic.

Formulating meanings: By systematically reviewing the extracted sentences, an understanding of their meanings and interconnections was sought. The meanings of significant sentences were coded.

Creating themes (main topics): This process was repeated for all interviews, formulating related meanings into themes, with similar codes placed in distinct categories.

Integrating results: By merging various categories based on common concepts, broader themes were created, providing comprehensive descriptions of the phenomenon.

Describing the essential structure of the phenomenon: A comprehensive description of the studied phenomenon was presented as a clear and explicit statement.

Validating findings: Ensuring the accuracy and validity of data is crucial in qualitative research. The researcher ensured this by dedicating sufficient time for data collection and involving two external experts for data verification. Additionally, Lincoln and Guba's (1985) proposed methods were used.

Validation in this study involved immersion in the research environment, spending complete time with

participants, and peer consultation. Verification included returning to each participant and asking questions to confirm the accuracy of information. The researcher fully engaged with the data, a method for ensuring the validity of findings. Data integrity analysis followed Lincoln and Guba's (1985) strategies: credibility, transferability, dependability, and confirmability.

Regarding credibility, Lincoln and Guba (1985) stated that phenomenological research can produce credible findings through external review (peer review), adequate referencing (comparing interpretations with raw data), and member checking (reviewing interpretations with participants). This study involved the researcher's prolonged engagement and briefing sessions with a qualitative researcher, supervisors, and advisors to control the consistency, stability, and reproducibility of the analysis, including formulating meaning units from significant sentences. Agreement on extracted codes was reached between the researcher and supervisors. Data were also confirmed by 10 participants and revised if conflicts arose.

Lincoln and Guba (1985) suggested that a precise description of the study context maximizes the range of information and enhances the transferability of findings in phenomenological research. Other strategies for transferability include providing a clear and comprehensive description of participants, research assumptions, conditions, and detailed descriptions. To enhance transferability, the researcher provided detailed descriptions of participants and analysis methods, facilitated by purposeful sampling and extensive quotations in the analysis.

Including two psychology and education experts improved reliability and mitigated disciplinary bias affecting data analysis and interpretation. Confirmability was ensured when data accurately reflected participants' information without researcher distortion.

Lincoln and Guba (1985) indicated that confirmability might be achieved through triangulation of sources and perspectives. In this study, the researcher reflected on data interpretation regularly, recording notes. Consistency was maintained by the researcher conducting all interviews and initial coding, with cross-verification by two psychology and education experts. The research team reviewed preliminary findings to ensure they accurately represented participants' responses.

3. Findings and Results

In the initial coding stage, open coding was conducted. The collected data from the semi-structured interviews were extracted through line-by-line analysis of the interview content and formatted as open codes. Then, similar codes were grouped into categories, and finally, all these categories were listed.

To convert open codes into categories, codes with similar themes were grouped together. After this stage, the open codes were refined, removing or dividing codes that could fall into more than one theme. Then, similar open codes were named and categorized. In the naming stage, the overall content of the open codes was chosen as the category name. Each category name should represent the core and common content of the open codes within that category. In this study, 142 open codes from qualitative data collected through semi-structured in-depth interviews were categorized and named into 24 categories, including: errors in academic concepts, perception of difficulty of academic materials, ability to concentrate and pay attention, personal attitudes and beliefs about education, avoidance behaviors, sleep and rest patterns, leisure and recreational activities, use of

technology and social networks, learning styles and study methods and academic planning, emotions related to academic pressure, experiences of disappointment and failure, motivation and enthusiasm for learning, levels of academic stress and anxiety, interaction with friends and classmates in the context of education, communication with teachers and their responsiveness, family interactions regarding education, school culture and classroom environment, virtual communication and its impact on education, academic goals and aspirations, intrinsic and extrinsic rewards, self-efficacy beliefs and personal abilities, individual and family norms and values, impact of previous success and failure experiences, and the importance of education in future planning.

After open coding and extracting the categories, the next stage was axial coding. This stage involved naming sub-themes and core themes. Initially, categories with similar content were placed under a sub-theme, and then related sub-themes were grouped under a core theme. Table 1 shows the categories, sub-themes, and core themes.

Table 1

Categorization of Categories, Sub-Themes, and Core Themes

Sub-Categories	Sub-Theme	Core Theme
Errors in academic concepts	Cognitive dimension	Lived experiences of students in academic procrastination
Perception of difficulty of academic materials		
Ability to concentrate and pay attention		
Personal attitudes and beliefs about education	Behavioral dimension	
Avoidance behaviors		
Sleep and rest patterns		
Leisure and recreational activities		
Use of technology and social networks		
Learning styles and study methods and planning	Emotional dimension	
Emotions related to academic pressure		
Experiences of disappointment and failure		
Motivation and enthusiasm for learning		
Levels of academic stress and anxiety	Relational dimension	
Interaction with friends and classmates in education		
Communication with teachers and their responsiveness		
Family interactions regarding education		
School culture and classroom environment		
Virtual communication and its impact on education	Motivational dimension	
Academic goals and aspirations		
Intrinsic and extrinsic rewards		
Self-efficacy beliefs and personal abilities		
Individual and family norms and values		
Impact of previous success and failure experiences		
Importance of education in future planning		

As described, after analyzing the qualitative data collected through semi-structured in-depth interviews and

reformatting the initial codes, the components of students' lived experiences of academic procrastination were

categorized into five themes: cognitive dimension, behavioral dimension, emotional dimension, relational dimension, and motivational dimension.

In this categorization, the cognitive dimension includes four categories: errors in academic concepts, perception of difficulty of academic materials, ability to concentrate and pay attention, and personal attitudes and beliefs about education. The behavioral dimension includes five categories: avoidance behaviors, sleep and rest patterns, leisure and recreational activities, use of technology and social networks, and learning styles and study methods and academic planning. The emotional dimension includes four categories: emotions related to academic pressure, experiences of disappointment and failure, motivation and enthusiasm for learning, and levels of academic stress and anxiety. The relational dimension includes five categories: interaction with friends and classmates in the context of education, communication with teachers and their responsiveness, family interactions regarding education,

school culture and classroom environment, and virtual communication and its impact on education. Finally, the motivational dimension includes six categories: academic goals and aspirations, intrinsic and extrinsic rewards, self-efficacy beliefs and personal abilities, individual and family norms and values, impact of previous success and failure experiences, and the importance of education in future planning.

To incorporate the discovered components in developing a counseling package based on the explored experiences of middle school girls regarding academic procrastination, and before developing the counseling package based on the components obtained in the qualitative section, ranking of themes based on the frequency of categories and open codes was used. Table 2 shows the frequency and percentage frequency of open codes and categories for each theme, as well as the initial rank, average rank, and final rank of each theme.

Table 2

Frequency and Percentage Frequency of Open Codes and Sub-Categories Related to Five Main Categories

No.	Theme	Frequency (Percentage Frequency) of Open Codes	Initial Rank in Open Codes	Frequency (Percentage Frequency) of Categories	Initial Rank in Categories	Average Rank	Final Rank
1	Cognitive dimension	35 (24.6%)	2	4 (16.6%)	4	3	2
2	Behavioral dimension	38 (26.7%)	1	5 (20.8%)	2	1.5	1
3	Emotional dimension	18 (12.6%)	5	4 (16.6%)	4	9	5
4	Relational dimension	26 (18.3%)	3	5 (20.8%)	2	5	3
5	Motivational dimension	25 (17.6%)	4	6 (25.0%)	1	5	3
6	Total	142 (100%)	-	24 (100%)	-	-	-

Therefore, according to the above ranking and considering the observed frequencies, the intended educational package in this study allocates two sessions for each dimension, as well as one introductory session at the beginning and two sessions for practicing learned skills and summarizing at the end. Based on the final ranking obtained, the allocated time for each theme is as follows: 1) behavioral dimension, 2) cognitive dimension, 3) relational dimension and motivational dimension, 4) emotional dimension. Each session lasts between 60 to 90 minutes. Consequently, according to the priorities obtained, the behavioral

dimension includes two 75-minute sessions, the cognitive dimension includes one 75-minute session and one 60-minute session, the relational and motivational dimensions each include two 60-minute sessions, and the emotional dimension includes one 90-minute session. The introductory session lasts 60 minutes, the practical exercise session lasts 90 minutes, and the summarizing session lasts 75 minutes.

As mentioned, this package is based on the discovered components, themes, and categories from qualitative data analysis. Considering their placement in the educational package, this package includes 12 sessions as follows:

Table 3

Features of Counseling Sessions Based on Students' Explored Experiences of Academic Procrastination

Session	Session Title	Goals	Activities, Techniques, and Assignments
1	Introduction and Overview (60 minutes)	Introduce the course and goals - Discuss the concept of academic procrastination - Interactive exercises to identify personal experiences	Activities: Introduction and warm-up: Start the session with introductions and participants' expectations. Concept of procrastination: Brief presentation by the instructor on academic procrastination and its effects. Group discussion: Divide participants into small groups to discuss their personal experiences with procrastination. Presentation and analysis: Present examples and participants' experiences to the whole group and analyze them. Writing exercise: Instruction to write a short report on personal experiences and feelings related to procrastination. Techniques: Use of group discussion techniques for interaction and exchange of ideas. Interactive presentations with slides and educational videos. Writing activities to enhance self-awareness and internal reflection. Assignment: Write a personal note on recent experiences of procrastination and its impact on academic performance.
2	Behavioral Dimension – Sleep Patterns and Leisure Activities (75 minutes)	- Feedback and review of previous session's assignments - Present opportunities and threats of remote work for dual-income couples - Group discussion on opportunities and threats of remote work - Review of the role of identified threats and opportunities in each member's life	Activities: Technology and social media education: Presentation and discussion on effective and balanced use of technology and social media in academic environments. Introduction to strategies to prevent distractions caused by excessive use of technology. Interactive learning style activities: Group and individual activities to identify different learning styles and how to adapt study methods to these styles. Time management planning and management: Activities to enhance academic planning and time management skills, including techniques for scheduling and prioritizing activities. Techniques: Use of interactive presentations and group discussions to teach effective use of technology. Conducting exercises and group activities to strengthen skills in recognizing learning styles and adapting study methods. Practical activities for developing planning and time management skills. Assignment: Prepare a scheduled plan for sleep and leisure activities.
3	Behavioral Dimension – Strengthening Learning Behaviors and Using Technology and Social Media (75 minutes)	- Feedback and assignment from the previous session - Discuss the threats and negative impacts of remote work - Review potential threats and negative impacts for each member to prevent them	Activities: Sleep and rest education: Discuss the impact of sleep and rest on academic performance and learning. Time management activity: Practical activities to teach time management, focusing on balancing leisure and study. Games and group activities: Engage in games that require planning and time management. Review sleep patterns: Instruction to write a report on sleep patterns and their impact on learning. Analysis and group discussion: Explore ways to improve sleep patterns and create balance in leisure activities. Techniques: Combination of theoretical education and practical activities to understand the impact of sleep and rest. Use of interactive games and group exercises for learning time management concepts. Writing activities and group discussions for analyzing and evaluating current behaviors and finding ways to improve. Assignment: Record and analyze daily technology and social media usage and provide strategies for more effective use.
4	Cognitive Dimension – Understanding Academic Concepts (75 minutes)	- Feedback and assignment from the previous session - Discuss opportunities and positive impacts of remote work - Review opportunities and potential positive impacts for each member	Activities: Discussing errors in academic concepts: Explore and discuss common mistakes and how to prevent them. Error correction activity: Work with real examples (e.g., math problems or scientific concepts) to identify and correct mistakes. Educational games: Use verbal and mental games to improve comprehension and understanding of concepts. Addressing misunderstandings: Practical exercises to develop skills in analyzing and interpreting information accurately. Review and group activity: Conduct group activities to review academic materials and identify common mistakes. Techniques: Use of concrete and practical examples to explain concepts. Interactive learning process through educational games and practical activities. Encourage critical thinking and independent analysis. Use of group exercises to enhance interaction and collaboration. Assignment: Self-assessment exercises to evaluate understanding of key concepts in different subjects.
5	Cognitive Dimension – Enhancing Focus and Attitudes (60 minutes)	- Feedback and assignment from the previous session - Compare opportunities and threats for each member - Provide general strategies for change and improvement	Activities: Focus techniques education: Present methods and techniques to enhance focus and attention, such as meditation or breathing exercises. Practical focus activities: Conduct activities requiring high concentration, such as solving puzzles or reading texts carefully. Group discussions on attitudes: Discuss positive and negative attitudes towards education and how they impact focus. Writing exercise to identify attitudes: Write notes on personal attitudes and how they affect academic performance. Group

			<p>feedback and analysis: Summarize activities and exchange views on ways to improve attitudes and enhance focus. Techniques: Use of interactive exercises to develop focus skills. Group discussion and exchange of views to raise awareness about different attitudes. Writing exercises for self-reflection and identifying thought patterns. Assignment: Perform a short daily meditation routine and record personal attitudes towards education.</p>
6	<p>Relational Dimension – Effective Communication with Friends and Teachers (60 minutes)</p>	<p>- Feedback and assignment from the previous session - Discuss the agency of opportunities and threats - Utilize agency of opportunities to eliminate threats with weak agency and subsequently weaken threats with strong agency</p>	<p>Activities: Communication skills activities: Exercises to improve communication skills with friends and teachers. Role-playing games: Perform scenarios to practice communication situations in the academic environment. Group discussion on the impact of social interactions: Exchange views on how friends and teachers affect learning and procrastination. Practical interactive exercises: Group activities to strengthen cooperation and mutual support. Writing exercise and feedback: Write about personal communication experiences and receive feedback from the group and instructor. Techniques: Use of role-playing exercises to develop communication skills. Group discussions to better understand the impact of social interactions. Practical activities to strengthen cooperation and group support. Use of writing activities for self-awareness and analyzing experiences. Assignment: Practice effective communication with a classmate or teacher on an academic topic.</p>
7	<p>Relational Dimension – Strengthening Educational Interactions (60 minutes)</p>	<p>- Feedback and assignment from the previous session - Discuss the agency of opportunities and threats - Utilize agency of opportunities to eliminate threats with weak agency and subsequently weaken threats with strong agency</p>	<p>Activities: Family and academic interactions: Discuss the role of family in supporting education and ways to improve communication with parents about academic issues. Focus on emotional support and family encouragement in the educational process. Review school culture and classroom environment: Conduct group activities to review the impact of school culture and classroom environment on learning. Emphasize the importance of creating a stimulating and positive classroom environment. Virtual communication education: Present and discuss how to use virtual communication effectively to support education, including using online educational platforms and social networks to exchange academic knowledge and experiences. Techniques: Interactive group discussions to strengthen communication with family and understand their role in education. Group activities to review and improve school culture and classroom environment. Use of educational presentations and group discussions to understand how to use virtual communication effectively in education. Assignment: Prepare a practical plan to improve communication with family regarding academic matters and actively participate in school-related activities.</p>
8	<p>Motivational Dimension – Setting Goals and Self-Efficacy Beliefs (60 minutes)</p>	<p>Set academic goals and planning - Strengthen self-efficacy beliefs - Practical activities to develop intrinsic motivation</p>	<p>Activities: Academic goal setting education: Review how to set realistic and achievable goals. Goal planning activities: Group activities to set short-term and long-term goals and methods to achieve them. Self-efficacy strengthening exercises: Exercises to boost confidence and reinforce personal ability beliefs. Group discussion and exchange of views: Share experiences and successful strategies in the academic field. Writing exercise: Write practical plans to achieve set goals. Techniques: Use of educational methods to set effective goals. Practical activities and group exercises to strengthen self-efficacy. Interactive discussions to share strategies and experiences. Writing exercises for self-awareness and personal planning. Assignment: Write a list of short-term and long-term academic goals and plan to achieve them.</p>
9	<p>Motivational Dimension – Norms and Successful Experiences (60 minutes)</p>	<p>Impact of individual and family norms and values - Learning from success and failure experiences - Discussion and sharing personal experiences</p>	<p>Activities: Reviewing individual and family norms and values: Exercises to identify how family culture and social norms affect academic motivation. Learning from success and failure activities: Exercises to review past experiences and learn from them. Group activities to share experiences: Discuss and exchange views on success and failure experiences and how to cope with them. Writing exercise to determine the importance of education: Write about the role of education in future planning and career goals. Feedback and summarizing: Receive feedback from the instructor and classmates on set plans and strategies. Techniques: Practical exercises and group activities to identify the impact of norms and cultural values. Interactive discussions to learn from past experiences. Writing activities for reflection and future planning. Feedback sessions to improve and adjust individual strategies. Assignment: Write about past academic success and failure experiences and the lessons learned from them.</p>

10	Emotional Dimension – Managing Stress and Emotions (90 minutes)	Stress and anxiety management techniques - Review experiences of disappointment and failure - Group activities to strengthen motivation	Activities: Stress management techniques education: Present methods to reduce stress and anxiety, such as breathing exercises, yoga, and meditation. Emotion identification activities: Exercises to identify and label emotions accurately and how they affect learning. Group discussion on disappointment and failure experiences: Review and exchange personal experiences and learn from them. Writing exercises: Write about academic challenges and related emotions. Group activities to strengthen motivation: Interactive games and activities to increase motivation and positive feelings. Techniques: Use of relaxation and meditation techniques to reduce stress. Group discussions to share and understand emotions better. Writing activities for self-awareness and identifying thought patterns. Use of interactive activities to boost morale and motivation. Assignment: Write daily journals about emotions and stress management methods.
11	Practical Workshop and Implementation	Practice learned exercises and techniques - Evaluate individual and group progress - Feedback and adjustment of individual plans	Activities: Practice learned exercises and techniques: Participants practice exercises and strategies learned throughout the course. Training activities: Perform exercises to strengthen acquired skills, such as time management, focus, and study techniques. Role-playing and simulation: Use realistic scenarios to practice communication and stress management skills. Group and interactive projects: Conduct small projects in groups to strengthen cooperation and interaction. Evaluation and feedback: Assess progress and receive feedback from the instructor and other participants. Techniques: Use of practical activities to practice and strengthen skills. Role-playing activities to simulate real situations. Group projects to encourage cooperation and interaction. Summarizing and feedback to evaluate progress and refine strategies. Assignment: Complete a small group or individual project based on skills learned during the course.
12	Summary and Conclusion (75 minutes)	Review key topics of the course - Set practical plans for the future - Final evaluation and feedback	Activities: Summarize key topics of the course: Review and summarize important points and key concepts learned during the course. Future planning: Help participants set individual plans and strategies for academic progress. Final evaluation and feedback: Conduct final evaluation by the instructor and receive participants' feedback. Discussion and exchange of views: Provide an opportunity for participants to share their views, experiences, and suggestions. Future goals and plans: Encourage participants to continue practicing and using the acquired skills. Techniques: Use of summarizing techniques to emphasize key points. Encourage planning and setting personal goals. Evaluation and feedback to understand progress and areas needing improvement. Group discussions to encourage exchange of views and suggestions. Assignment: Prepare a personal notebook on course progress and achievements and plan for continued skill development.

In the introductory session, the course and its objectives are introduced. Participants have the opportunity to get to know each other and understand the concept of academic procrastination. Through group discussions and interactive activities, participants discuss their personal experiences with procrastination and develop a common understanding of its challenges and effects on academic performance. This session serves as a foundation for identifying and better understanding the issues that will be addressed in subsequent sessions.

The second session examines the impact of sleep patterns and leisure activities on academic procrastination. Participants learn about the importance of sufficient sleep and time management to balance leisure and study. Through time management workshops and interactive activities, they develop the necessary skills to create healthy sleep patterns and effectively plan their daily activities.

In the third session, the focus is on teaching the proper and effective use of technology and social media in academic settings. Students learn strategies to reduce distractions caused by excessive technology use and how to use these tools constructively in their studies. Additionally, interactive workshops are conducted to identify different learning styles and adapt study methods to these styles, helping students achieve more effective and optimized study habits.

The fourth session focuses on the cognitive dimension of procrastination, examining common errors in academic concepts. Through practical workshops and educational games, participants gain a deeper understanding of how mistakes occur in learning and effective methods for identifying and correcting them. This session also helps participants develop their analytical and interpretive skills to prevent misunderstandings in their studies.

The fifth session aims to enhance focus and examine personal attitudes and beliefs towards education. Using techniques such as meditation, breathing exercises, and focus activities, participants acquire skills to increase concentration and reduce distractions in academic and study environments. Group discussions and writing activities also help participants identify and correct their negative attitudes, significantly improving their academic performance.

The sixth session focuses on improving communication skills with friends and teachers. Participants learn about the importance of positive social interactions and their impact on learning and academic procrastination. Through role-playing games, group discussions, and interactive activities, they develop the necessary skills to establish and maintain supportive and effective relationships. This session helps participants understand how to be effective in their interactions and develop practical plans to improve their relationships.

The seventh session strengthens educational interactions, focusing on family interactions, school culture and classroom environment, and virtual communication. Students learn how to communicate more effectively with their families about academic issues and how to benefit from school culture and classroom environment to enhance their learning. Additionally, they become familiar with effective methods for using virtual communication to support their studies, including using online educational platforms and social networks to exchange academic knowledge and experiences.

The eighth session is dedicated to strengthening motivation and self-efficacy beliefs. Participants learn skills for setting effective and achievable goals. Through practical workshops, group discussions, and writing exercises, they examine and strengthen their beliefs in their personal abilities. This session helps participants boost their intrinsic motivation for academic success.

The ninth session examines the role of norms, individual and family values, and experiences of success and failure in shaping academic motivation. Through discussion and experience-sharing workshops, participants explore how these factors influence their studies and learn how to use their past experiences to create a successful future. Writing activities and group discussions help them develop specific plans to achieve their academic goals.

The tenth session focuses on managing emotions and stress reduction strategies. Participants learn various techniques to cope with stress and anxiety, including breathing exercises, yoga, and meditation. They also have

the opportunity to discuss their experiences of disappointment and failure and discover effective ways to manage these experiences. This session helps participants identify and manage their emotions better, enabling them to handle academic challenges more effectively.

The eleventh session is dedicated to the practical implementation of the skills and knowledge acquired throughout the course. Participants practice the exercises and strategies learned in realistic scenarios through workshops and group activities. This session serves as an opportunity to assess progress, receive feedback, and adjust individual strategies, allowing participants to apply their skills in real situations.

The twelfth and final session summarizes the entire course, reviewing the progress and achievements of the participants. This session provides an opportunity to revisit key topics and set practical plans for continued academic progress. Participants share their views, experiences, and suggestions, receiving final evaluation and feedback. The session concludes with participants feeling confident and equipped with a clear plan for their academic future.

4. Discussion and Conclusion

To achieve the components of students' lived experiences of academic procrastination, qualitative phenomenology and content analysis methods were used to analyze the data. Based on the obtained components, an educational program was designed and developed. The results of the content analysis of the data collected through semi-structured in-depth interviews showed that students' lived experiences of academic procrastination included five main dimensions: cognitive, behavioral, emotional, relational, and motivational. The cognitive dimension comprises four categories: errors in academic concepts, perception of difficulty of academic materials, ability to concentrate and pay attention, and personal attitudes and beliefs about education. The behavioral dimension includes five categories: avoidance behaviors, sleep and rest patterns, leisure and recreational activities, use of technology and social networks, and learning styles and study methods and planning. The emotional dimension consists of four categories: emotions related to academic pressure, experiences of disappointment and failure, motivation and enthusiasm for learning, and levels of academic stress and anxiety. The relational dimension includes five categories: interaction with friends and classmates in the context of education, communication with teachers and their

responsiveness, family interactions regarding education, school culture and classroom environment, and virtual communication and its impact on education. Finally, the motivational dimension includes six categories: academic goals and aspirations, intrinsic and extrinsic rewards, self-efficacy beliefs and personal abilities, individual and family norms and values, impact of previous success and failure experiences, and the importance of education in future planning.

The results obtained in this study are consistent with the findings of prior studies (Abbasi et al., 2015; Abdolshahi & Mehdi Reza, 2019; Akbari Boorang et al., 2023; Assem et al., 2023; Azimi et al., 2017; Baradaran & Ranjbar Noushari, 2022; Batool, 2020; Bong et al., 2014; Cassidy & Johnson, 2002; Cheng et al., 2023; Cheraghi & Yousefi, 2019; Dehghani & Hekmatiyani Fard, 2020; Eisenbeck et al., 2019; Gustavson & Miyake, 2017; Hashemi & Latifian 2014; Hekmatiyani Fard, 2023; Heshmati et al., 2018; Hong et al., 2021; Hosseini et al., 2020; Hossinpanah & Kazemianmoghadam, 2021; Howell et al., 2006; Joghataei et al., 2023; Kağan et al., 2010; Kim & Seo, 2015; Krispenz et al., 2019; Kuftyak, 2022; Malatincová, 2015; Melgaard et al., 2022; Moti et al., 2012; Qian & Zhao, 2018; Ragusa et al., 2023; Rasouli et al., 2019; Salam & Astuti, 2023; Saplavaska & Jerkunkova, 2018; Savari, 2013; Sedighi Arfaee et al., 2021; Seif, 2016; Soetanto et al., 2024; Solomon & Rothblum, 1984; Sparfeldt & Schwabe, 2024; Sun, 2023; Tavakoli & Ebrahimi, 2020; Tulu, 2017; Wang et al., 2021; Won & Yu, 2018; Xhakolli & Hamzallari, 2023).

Explaining the obtained findings, it can be stated that the behavioral dimension in the academic context refers to students' behavioral patterns, including study approaches, time organization, and social interactions. Studies have shown that effective academic behaviors directly impact students' academic performance and success (Gustavson & Miyake, 2017; Joghataei et al., 2023). This dimension of learning indicates a direct link between daily habits and academic outcomes. Additionally, avoidance behaviors, such as delaying study and avoiding assignments, are crucial issues in the behavioral dimension. Research has shown that these behaviors can lead to reduced academic efficiency and increased stress (Assem et al., 2023; Dehghani & Hekmatiyani Fard, 2020; Krispenz et al., 2019; Kuftyak, 2022; Ragusa et al., 2023; Salam & Astuti, 2023; Sedighi Arfaee et al., 2021; Sun, 2023). Therefore, understanding the factors that contribute to these behaviors and developing

strategies to counter them can help improve academic performance.

Studies have also emphasized that developing time management and planning skills can reduce academic procrastination and improve performance (Moti et al., 2012; Solomon & Rothblum, 1984; Won & Yu, 2018). Additionally, teaching effective study methods and balanced use of technology to support learning are key components in strengthening the behavioral dimension.

The cognitive dimension includes cognitive and mental processes involved in learning, such as information processing, attention, comprehension, memory, and problem-solving. Numerous studies have highlighted the importance of cognitive processes in education and their role in advancing learning and academic success (Cheng et al., 2023; Hossinpanah & Kazemianmoghadam, 2021; Melgaard et al., 2022; Sedighi Arfaee et al., 2021; Sun, 2023; Xhakolli & Hamzallari, 2023). These studies have shown that deeper understanding and effective application of these processes can help improve academic performance. Errors in understanding academic concepts are a key factor in the cognitive dimension that can affect academic performance. Studies have shown that students sometimes misunderstand concepts due to inappropriate teaching methods or lack of sufficient background. This issue requires specific educational techniques to identify and correct these errors (Assem et al., 2023; Sedighi Arfaee et al., 2021).

Moreover, personal attitudes and beliefs about education significantly impact the cognitive dimension. Bandura's self-efficacy theory emphasizes that a positive attitude toward learning can increase motivation and interest in the educational process, while a negative attitude can hinder learning activities. Identifying and correcting negative attitudes can effectively improve academic performance (Heshmati et al., 2018; Sedighi Arfaee et al., 2021; Wang et al., 2021).

The emotional dimension in learning refers to the impact of emotions and emotional states on academic performance. This dimension includes emotional experiences such as anxiety, stress, joy, and motivation. Studies have shown that positive emotions can increase motivation and enhance learning, while negative emotions like anxiety can disrupt academic performance (Hosseini et al., 2020; Melgaard et al., 2022; Ragusa et al., 2023; Sedighi Arfaee et al., 2021; Tavakoli & Ebrahimi, 2020; Xhakolli & Hamzallari, 2023). Academic stress and anxiety are important components of the emotional dimension that can affect learning and academic performance. Research has shown that chronic

stress can lead to decreased concentration, memory problems, and reduced performance (Gustavson & Miyake, 2017; Sedighi Arfaee et al., 2021). Therefore, managing stress and anxiety through relaxation techniques and stress management strategies is vital for students. Negative emotions such as disappointment and failure are also an important part of the emotional dimension. Studies in educational psychology explain how these negative emotions can reduce motivation and interest in learning (Sedighi Arfaee et al., 2021). Thus, addressing these emotions and developing positive coping methods for failures is important for maintaining motivation and continuing academic efforts.

The relational dimension in education refers to the interactions and relationships students have with classmates, teachers, and their families. Research has shown that positive and supportive social interactions can enhance academic performance and students' emotional well-being (Salam & Astuti, 2023). Attention to the quality of these interactions is crucial for creating a stimulating and supportive learning environment. Interaction with friends and classmates plays a significant role in students' educational experiences. Studies have shown that positive social relationships can increase self-confidence and a sense of belonging, leading to improved academic progress (Assem et al., 2023). Creating a collaborative and supportive classroom environment can help strengthen these interactions.

Communication with teachers is another important aspect of the relational dimension. Research has shown that teachers who establish positive communication with students and provide emotional and educational support can positively impact students' motivation and academic progress (Melgaard et al., 2022; Ragusa et al., 2023; Xhakolli & Hamzallari, 2023). Therefore, developing teachers' communication skills and creating supportive relationships in the classroom is of great importance.

Family interactions are also a crucial part of the relational dimension. Research has shown that family support and encouragement can increase academic motivation and a sense of belonging to school (Joghataei et al., 2023). Families play a key role in students' academic progress by providing emotional support and encouraging active participation in the educational process.

Motivation is another key aspect that significantly impacts learning and academic progress. Motivational theories, such as goal-setting theory, emphasize the importance of motivation in determining learning behaviors

and striving to achieve academic goals. Strengthening intrinsic and extrinsic motivation can increase students' engagement and commitment to the learning process (Cheng et al., 2023; Melgaard et al., 2022; Sedighi Arfaee et al., 2021; Sun, 2023; Xhakolli & Hamzallari, 2023). The motivational dimension in education refers to factors that encourage students to learn and engage in academic activities. This dimension includes intrinsic and extrinsic motivations that impact students' academic behaviors and performance. Studies have shown that strong motivations can increase effort, perseverance, and academic progress (Melgaard et al., 2022; Ragusa et al., 2023; Sedighi Arfaee et al., 2021; Xhakolli & Hamzallari, 2023). The importance of this dimension lies in creating sustainable and positive motivation for learning. Additionally, setting academic goals and aspirations is an important aspect of the motivational dimension. Dweck's goal-setting theory (1986) emphasizes that challenging and achievable goals can increase motivation and improve academic performance. Students with specific goals usually show more motivation for effort and success. Moreover, intrinsic and extrinsic rewards also play a role in creating and maintaining academic motivation. Deci and Ryan's self-determination theory (2002) states that intrinsic rewards, such as personal satisfaction and interest in the subject, can enhance motivation as much as extrinsic rewards, such as grades and praise from others. Appropriate rewards and encouragement can strengthen students' motivation and perseverance. On the other hand, self-efficacy beliefs, part of Bandura's social-cognitive theory (1977), refer to students' beliefs in their abilities to succeed in academic activities. Students who believe they can succeed in education usually show more motivation for effort and progress (Eisenbeck et al., 2019; Ragusa et al., 2023; Wang et al., 2021). Enhancing self-efficacy through successful experiences and positive feedback can help improve academic motivation.

In this study, an educational program was designed, including two sessions for each of the mentioned dimensions. Additionally, one introductory session, two practice sessions, and one summary session were added, whose validity and reliability were also confirmed. The time prioritization was based on the final ranking of the themes, including behavioral, cognitive, relational, motivational, and emotional dimensions. Sessions last between 60 to 90 minutes, and the timing of each session is determined based on priorities. In the introductory session, participants are introduced to the concept of academic procrastination and the course objectives and discuss their personal experiences.

The second session focuses on sleep patterns and leisure activities and their impact on academic procrastination. The third session focuses on effective use of technology and social networks and understanding learning styles. In the fourth session, the cognitive dimension is examined, focusing on conceptual errors and effective methods for identifying and correcting them. The fifth session strengthens focus and corrects negative attitudes towards education. The sixth and seventh sessions enhance communication skills with friends, teachers, and family and address virtual communication and its impact on education. The eighth and ninth sessions focus on strengthening motivation and self-efficacy beliefs, understanding academic goals, and the impact of success and failure experiences. The tenth and eleventh sessions address emotion management and stress reduction techniques and practical implementation of skills. In the final session, participants summarize their progress and achievements and develop practical plans for continued academic progress.

Sessions related to the behavioral dimension focus on developing desirable academic behaviors and reducing procrastination. Topics such as healthy sleep patterns, time management, and effective leisure activities are discussed. Based on behavioral theories, these sessions help students identify and change behaviors that lead to academic procrastination. Multiple studies have observed a strong relationship between daily behaviors and academic performance. Research has shown that regulating behaviors such as sleep patterns and time management can directly impact productivity and reduce procrastination (Assem et al., 2023; Joghataei et al., 2023; Sedighi Arfaee et al., 2021; Wang et al., 2021). Additionally, balancing leisure and study is recognized as a key factor in improving quality of life and reducing academic stress.

In the cognitive dimension, the focus is on enhancing cognitive abilities such as concentration, problem-solving, and understanding academic concepts. Sessions include activities to improve learning skills, identify and correct conceptual errors, and strengthen positive attitudes towards learning. These sessions are designed based on cognitive and metacognitive theories. Research in cognitive psychology places significant emphasis on the importance of cognitive processes such as concentration and problem-solving in learning (Baradaran & Ranjbar Noushari, 2022; Deghani & Hekmatiyani Fard, 2020; Hong et al., 2021; Krispenz et al., 2019; Sedighi Arfaee et al., 2021; Tavakoli & Ebrahimi, 2020). In this regard, errors in academic concepts and how to correct them are also an important part of the learning

process. Strengthening these skills can help students learn academic materials more effectively and improve their academic performance.

Sessions related to the relational dimension are dedicated to enhancing students' communication and interaction skills. These sessions emphasize the importance of effective interaction with classmates, teachers, and family and include activities to strengthen communication abilities and create supportive relationships in the academic environment. This dimension is designed based on social learning theories and the impact of social relationships on academic learning. Social learning theories emphasize the importance of social interactions and supportive relationships in the learning process. The ability to communicate effectively with others, including classmates, teachers, and family, plays a significant role in students' social growth and academic performance (Bong et al., 2014; Hashemi & Latifian 2014; Kuftyak, 2022; Salam & Astuti, 2023; Savari, 2013; Sedighi Arfaee et al., 2021; Xhakolli & Hamzallari, 2023). These interactions can provide sources of support and motivation, helping students face academic challenges.

Sessions related to the motivational dimension are dedicated to strengthening academic motivation and self-efficacy beliefs. These sessions include activities to set reasonable academic goals, strengthen intrinsic and extrinsic motivation, and develop positive beliefs about academic abilities. This dimension is designed based on motivational theories such as self-determination theory. Self-determination theory emphasizes the importance of intrinsic and extrinsic motivations in learning behaviors. Setting reasonable goals and strengthening self-efficacy beliefs can help increase academic motivation and improve students' performance. This dimension helps students increase their motivation for academic success by setting specific goals and having positive beliefs (Abbasi et al., 2015; Eisenbeck et al., 2019; Howell et al., 2006; Moti et al., 2012; Ragusa et al., 2023; Wang et al., 2021).

In the emotional dimension, the focus is on managing emotions and academic stress. Sessions include techniques for reducing stress, managing negative emotions such as anxiety and disappointment, and strengthening positive feelings towards learning. These sessions are designed based on emotional psychology and emotional learning theories and help students cope healthily with emotional challenges related to education. Many researchers emphasize the importance of managing emotions and stress in learning (Abdolshahi & Mehdi Reza, 2019; Baradaran & Ranjbar Noushari, 2022; Cheng et al., 2023; Cheraghi & Yousefi,

2019; Dehghani & Hekmatiyani Fard, 2020; Eisenbeck et al., 2019; Heshmati et al., 2018; Krispenz et al., 2019; Sedighi Arfaee et al., 2021). Emotional management skills and stress reduction strategies can help students cope healthily with emotional challenges related to education. This dimension enables students to better manage negative emotions such as anxiety and disappointment and move towards a positive and constructive academic experience.

5. Limitations & Suggestions

This study has several limitations. The sample size was limited to middle school girls in a specific district of Tehran, which may not be representative of the broader student population. The qualitative nature of the research and the reliance on self-reported data from semi-structured interviews may introduce biases and limit the generalizability of the findings. Additionally, cultural factors specific to the region and gender may influence the results, making it challenging to apply these findings universally. Finally, the study's cross-sectional design does not allow for the assessment of long-term effects of the educational intervention on academic procrastination.

Future research should aim to include a more diverse and larger sample to enhance the generalizability of the findings across different regions, cultures, and educational systems. Longitudinal studies are recommended to evaluate the long-term impact of interventions on academic procrastination and academic performance. Researchers should also consider incorporating quantitative measures to complement qualitative data, providing a more comprehensive understanding of the factors contributing to academic procrastination. Exploring the role of technology and social media in greater depth, as well as examining the potential differences in procrastination behaviors among different age groups and educational levels, would further enrich the field.

The findings of this study suggest that educational interventions targeting multiple dimensions—cognitive, behavioral, emotional, relational, and motivational—can be effective in reducing academic procrastination. Educators and school counselors should consider implementing comprehensive programs that address these dimensions, focusing on enhancing students' study skills, time management, emotional regulation, and communication abilities. Schools could benefit from training teachers in effective communication strategies and creating supportive classroom environments that foster positive social interactions. Additionally, incorporating technology

management education within the curriculum may help students use digital tools more effectively and reduce distractions, thereby improving their academic outcomes.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed in this article.

References

- Abbasi, M., Pirani, Z., Razmjoiy, L., & Bonyadi, F. (2015). Role of Procrastination and Motivational Self-Regulation in Predicting Students' Behavioral Engagement. *Edu-Str-Med-Sci*, 8(5), 295-300. <http://edcbmj.ir/article-1-835-en.html>
- Abdolshahi, H. R., & Mehdi Reza, S. (2019). The relationship between self-compassion and procrastination: The mediating role of shame and guilt. *Journal of Fundamentals of Mental Health*, 21(4), 233-239. <https://doi.org/10.22038/jfmh.2019.14398>
- Akbari Boorang, M., Adelipoor, Z., & Gholami Boorang, F. (2023). Evaluation of academic procrastination in connection with the five personality factors and goal orientation. *Quarterly Journal of Research and Planning in Higher Education*, 22(1), 1-18. https://journal.irphe.ac.ir/article_702888.html
https://journal.irphe.ac.ir/article_702888_963cfe85d2fa50795bd2557a6fb69e44.pdf
- Assem, H. D., Nartey, L., Appiah, E., & Aidoo, J. K. (2023). A Review of Students' Academic Performance in Physics: Attitude, Instructional Methods, Misconceptions and Teachers

- Qualification. *European Journal of Education and Pedagogy*, 4(1), 84-92. <https://doi.org/10.24018/ejedu.2023.4.1.551>
- Azimi, D., Gadimi, S., Khazan, K., & Dargahi, S. (2017). The Role of Psychological Capitals and academic motivation in academic vitality and decisional procrastination in nursing students. *JMED*, 12(3), 147-157. <http://jmed.ssu.ac.ir/article-1-807-en.html>
- Baradaran, M., & Ranjbar Noushari, F. (2022). Effectiveness of Emotion Regulation Skills Training on Academic Procrastination and Cognitive Flexibility among Students with Internet Addiction [Research]. *Quarterly Journal of Child Mental Health*, 9(2), 21-35. <https://doi.org/10.52547/jcmh.9.2.3>
- Batool, S. S. (2020). Academic achievement: Interplay of positive parenting, self-esteem, and academic procrastination. *Australian Journal of Psychology*, 72(2), 174-187. <https://doi.org/10.1111/ajpy.12280>
- Bong, M., Hwang, A., Noh, A., & Kim, S.-i. (2014). Perfectionism and motivation of adolescents in academic contexts. *Journal of Educational Psychology*, 106(3), 711-729. <https://doi.org/10.1037/a0035836>
- Cassady, J. C., & Johnson, R. E. (2002). Cognitive Test Anxiety and Academic Performance. *Contemporary Educational Psychology*, 27(2), 270-295. <https://www.sciencedirect.com/science/article/pii/S0361476X0191094X>
- Cheng, S.-L., Chang, J.-C., Quilantan-Garza, K., & Gutierrez, M. L. (2023). Conscientiousness, Prior Experience, Achievement Emotions and Academic Procrastination in Online Learning Environments. *British Journal of Educational Technology*, 54(4), 898-923. <https://doi.org/10.1111/bjet.13302>
- Cheraghi, A. z., & Yousefi, F. (2019). The investigation of mediating role of academic motivation in the relationship between self-efficacy and academic procrastination. *Knowledge & Research in Applied Psychology*, 2(20), 34-47. <https://doi.org/10.30486/jrsp.2019.665258>
- Dehghani, Y., & Hekmatian Fard, S. (2020). Investigation Role of Educational Optimism, Metacognitive Beliefs and Cognitive Emotion Regulation in Prediction of Self-Handicapping in Students with Special Learning Disabilities. *Psychology of Exceptional Individuals*, 10(37), 135-159. <https://doi.org/10.22054/jpe.2020.50285.2112>
- Eisenbeck, N., Carreno, D. F., & Uclés-Juárez, R. (2019). From psychological distress to academic procrastination: Exploring the role of psychological inflexibility. *Journal of Contextual Behavioral Science*, 13, 103-108. <https://doi.org/10.1016/j.jcbs.2019.07.007>
- Gustavson, D. E., & Miyake, A. (2017). Academic procrastination and goal accomplishment: A combined experimental and individual differences investigation. *Learning and Individual Differences*, 54, 160-172. <https://doi.org/10.1016/j.lindif.2017.01.010>
- Hashemi, L., & Latifian, M. (2014). Perfectionism and Academic Procrastination: Study of Mediational Role of Test Anxiety. *Personality and individual differences*, 2(3), 73-99. <https://www.magiran.com/paper/1329285>
- HekmatianFard, S., Golestaneh, Seyed Mousa. (2023). The relationship between early maladaptive schemas and academic procrastination with the mediating role of personality traits and perfectionism. *Journal of Psychology*, 1(27), 38-50. <http://iranapsy.ir/fa/Article/38155>
- Heshmati, A., Saed, O., Mohammadi, J., Zenoozian, S., & Yousefi, F. (2018). The efficacy of group acceptance and commitment therapy on reducing academic procrastination and improving difficulty in emotion regulation: A randomized clinical trial [Original Research]. *Scientific Journal of Kurdistan University of Medical Sciences*, 23(5), 65-77. <https://doi.org/10.52547/sjku.23.5.65>
- Hong, W., Liu, R.-D., Ding, Y., Jiang, S., Yang, X., & Sheng, X. (2021). Academic procrastination precedes problematic mobile phone use in Chinese adolescents: A longitudinal mediation model of distraction cognitions. *Addictive behaviors*, 121, 106993. <https://doi.org/10.1016/j.addbeh.2021.106993>
- Hosseini, S., Rezaei, A., Kazemi, S., & Samani, S. (2020). The Effectiveness of Motivational Interviewing on Academic Procrastination in Adolescents. *Psychological Models and Methods*, 11(39), 81-94. https://jpmmm.marvdasht.iau.ir/article_4310_6b04e0ecc33977a25c0bd83d05de5c1d.pdf
- Hossinpanah, Z., & Kazemianmoghadam, K. (2021). The causal relationship between cultural intelligence and academic vitality with self-directed learning through academic procrastination. *Psychological Achievements*, 28(1), 177-196. <https://doi.org/10.22055/psy.2021.33118.2527>
- Howell, A. J., Watson, D. C., Powell, R. A., & Buro, K. (2006). Academic procrastination: The pattern and correlates of behavioural postponement. *Personality and individual differences*, 40(8), 1519-1530. <https://doi.org/10.1016/j.paid.2005.11.023>
- Joghataei, A., Mafakheri, A., & bakhshpoor, a. (2023). Evaluation of the effectiveness of mindfulness training on high-risk and procrastination behaviors and fear of success among students. *Journal of Applied Family Therapy*, 4(1), 64-81. <https://doi.org/10.22034/ajt.2023.334795.1496>
- Kağan, M., Çakır, O., İlhan, T., & Kandemir, M. (2010). The explanation of the academic procrastination behaviour of university students with perfectionism, obsessive – compulsive and five factor personality traits. *Procedia - Social and Behavioral Sciences*, 2(2), 2121-2125. <https://doi.org/10.1016/j.sbspro.2010.03.292>
- Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and individual differences*, 82, 26-33. <https://www.sciencedirect.com/science/article/pii/S0191886915001610>
- Krispenz, A., Gort, C., Schültke, L., & Dickhäuser, O. (2019). How to Reduce Test Anxiety and Academic Procrastination Through Inquiry of Cognitive Appraisals: A Pilot Study Investigating the Role of Academic Self-Efficacy [Original Research]. *Frontiers in psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01917>
- Kuftyak, E. V. (2022). Procrastination, stress and academic performance in students [10.3897/ap.5.e0965]. *ARPHA Proceedings*, 5, 965-974.
- Malatincová, T. (2015). The mystery of “should”: Procrastination, delay, and reactance in academic settings. *Personality and individual differences*, 72, 52-58. <https://doi.org/10.1016/j.paid.2014.08.015>
- Melgaard, J., Monir, R., Lasrado, L. A., & Fagerstrøm, A. (2022). Academic Procrastination and Online Learning During the COVID-19 Pandemic. *Procedia Computer Science*, 196, 117-124. <https://doi.org/10.1016/j.procs.2021.11.080>
- Moti, amp, i, H., Heidari, M., & Sadat Sadeqi, M. (2012). Predicting Academic Procrastination during Self-Regulated Learning in Iranian First-Grade High-School Students. *Educational Psychology*, 8(24), 50-72. https://jep.atu.ac.ir/article_2393.html
- Qian, L., & Zhao, F. (2018). Academic Stress, Academic Procrastination and Academic Performance: A Moderated Dual-Mediation Model. *Journal on Innovation and*

- Sustainability* *Risus*. <https://doi.org/10.24212/2179-3565.2018v9i2p38-46>
- Ragusa, A., González-Bernal, J., Trigueros, R., Caggiano, V., Navarro, N., Minguez-Minguez, L. A., Obregón, A. I., & Fernandez-Ortega, C. (2023). Effects of academic self-regulation on procrastination, academic stress and anxiety, resilience and academic performance in a sample of Spanish secondary school students [Original Research]. *Frontiers in psychology*, *14*. <https://doi.org/10.3389/fpsyg.2023.1073529>
- Rasouli, F., Sangani, A., & Jangi, P. (2019). The Relationship between academic procrastination, locus of control and achievement motivation with academic achievement in nursing student [Quantitative-Research]. *2 Journal of Nursing Education*, *8*(1), 21-28. <http://jne.ir/article-1-1026-en.html>
- Salam, N. H. Z., & Astuti, B. (2023). THE EFFECTIVENESS OF GROUP COUNSELING REALITY FOR STUDENTS' ACADEMIC PROCRASTINATION BEHAVIOR [group counseling, reality counseling, academic procrastination]. *2023, 10*(2). <https://doi.org/10.46827/ejes.v10i2.4676>
- Saplavaska, J., & Jerkunkova, A. (2018). Academic procrastination and anxiety among students. 17th International Scientific Conference Engineering for Rural Development,
- Savari, K. (2013). The simple & multiple relationship of mastery & Performance goals with academic procrastination. *Social Cognition*, *2*(1), 44-51. https://sc.journals.pnu.ac.ir/article_2903_fb1ecdb105b2fbfcf_e67c5f07655f145.pdf
- Sedighi Arfaee, F., Rashidi, A., & Tabesh, R. (2021). The Distress Tolerance in the Elderly: The Role of Experiential Avoidance, Rumination and Mindfulness. *Aging Psychology*, *7*(1), 12-11. <https://doi.org/10.22126/jap.2021.6108.1498>
- Seif, M. (2016). The causal model of academic procrastination based on goal orientations with the mediating role academic engagement and academic Self-Efficacy. *Biquarterly Journal of Cognitive Strategies in Learning*, *4*(6), 103-117. <https://doi.org/10.22084/j.psychogy.2016.1452>
- Soetanto, D., Franco-Leal, N., & Larty, J. (2024). Strategic Orientation and New Product Development Performance of Academic Spin-Offs: The Importance of Team Cohesion and Team Heterogeneity. *Ieee Transactions on Engineering Management*. <https://doi.org/10.1109/tem.2022.3199558>
- Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of counseling psychology*, *31*(4), 503-509. <https://doi.org/10.1037/0022-0167.31.4.503>
- Sparfeldt, J. R., & Schwabe, S. (2024). Academic procrastination mediates the relation between conscientiousness and academic achievement. *Personality and individual differences*, *218*, 112466. <https://doi.org/10.1016/j.paid.2023.112466>
- Sun, T. (2023). Academic Procrastination as a Mediator Between Learning Environment and Academic Performance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *67*(1), 1578-1582. <https://doi.org/10.1177/21695067231192638>
- Tavakoli, O., & Ebrahimi, S. (2020). The effectiveness of mindfulness-based cognitive therapy (MBCT) on academic motivation, self-efficacy and academic procrastination of students. *Journal of new developments in psychology, educational sciences and education*, *3*(28), 27-41. <https://www.jonapte.ir/fa/showart-29e7004637e710585a631830db312b50>
- Tulu, D. T. (2017). Should online social Medias (OSMs) be banned at work? The impact of social Medias on employee productivity in Ambo University, a case study. *Research in International Business and Finance*, *42*, 1096-1102. <https://doi.org/10.1016/j.ribaf.2017.07.044>
- Wang, Y., Gao, H., Sun, c., Liu, J., & Fan, X.-l. (2021). Academic procrastination in college students: The role of self-leadership. *Personality and individual differences*, *178*, 110866. <https://www.sciencedirect.com/science/article/pii/S0191886921002415>
- Won, S., & Yu, S. L. (2018). Relations of perceived parental autonomy support and control with adolescents' academic time management and procrastination. *Learning and Individual Differences*, *61*, 205-215. <https://www.sciencedirect.com/science/article/pii/S1041608017302157>
- Khakolli, B. R., & Hamzallari, O. (2023). Academic Procrastination in Students During Covid-19 Pandemic: The Role of Perceived Challenges and Learning Motivation. *Journal of Educational and Social Research*, *13*(1), 196. <https://doi.org/10.36941/jesr-2023-0018>