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Designing a Wisdom Training Package based on Ardelt's Perspective and Investigating Its Effect on Creative Thinking of Students

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Developing a creative thinking is one of the main goals of the educational system and strengthening students with wisdom skills can be a good way to cultivate creative thinking. The present study aimed to design a Wisdom Training Protocol based on Ardelt's perspective and investigate its effect on the creative thinking of students. This semi-experimental study used a pretest-posttest design with a control group. The statistical population consisted of all sixth-grade female students in District 4 of Tehran, Iran, in the first half of 2024, of whom 30 were selected as the sample through random sampling. They were then randomly assigned into the experimental and control groups (15 students in each group). The intervention group received fifteen 60-minute Wisdom Training

Protocol sessions twice weekly, while the control group didn't. The Runco Ideational Behavior Scale for students was administered to both groups. The SPSS software, version 26, was used to analyze the data. Covariance results showed that Wisdom Training Protocol positively increases the creative thinking of sixth-grade female students ($P < .001$). Considering the positive effect of Wisdom Training Protocol, it can be practically beneficial to psychologists and teachers.

Keywords: wisdom training, creative thinking, students.

Modern human life has changed dramatically compared to past centuries. This type of life, because of various complexities and continuous advancements in knowledge and technology along with the vast flow of information, necessitates teaching skills that assist in keeping up with the progress of science and technology. One of the most important skills for living a dynamic life is creative thinking. It helps to transcend experience and see many choices, thus making one's life more flexible and multi-faceted by viewing phenomena from all sides. Usually, creative people see any problem as a new experience and face problems confidently. For this reason, in most countries, one of the main goals of the educational system is to develop creative and self-flourishing people who can understand the world's complexity and manage it creatively and innovatively. Countries that realize the importance of this thinking and how to develop it in students are on the front lines of successful countries (Miri, David & Uri, 2007). This is because students are the most important capital of any country and the future of the countries is based on the status of students, their education, and the ability of students to solve the problems. Education and learning develop these skills. In primary education, many goals are desired, one of the most important of

which is the education of the main intellectual skills and the expansion of the intellectual horizon of the students. To achieve this goal, it is necessary to focus on developing students' creative thinking. Creative thinking helps students increase their psychological well-being, and the students who develop their creative thinking skills feel more satisfied with their lives and cope with life's issues and problems. It is a skill needed for developing thinking, problem-solving, decision-making, and creativity (Wang & Wegerif, 2019).

In defining and explaining, Santrock(2023) mentions that creative thinking is a form of thinking that results in new perspectives, novel approaches, and integrated ways of understanding and perceiving objects and situations (Santrock, 2023). According to Torrance and Goff (1989), creative thinking is a type of mental capability and skill that enables a trained individual to create new and unusual ideas by visualizing and analyzing issues and phenomena. In essence, creative thinking is characterized by eliminating unnecessary assumptions and generating original thoughts. Perkins believes creative thinking is a form of thought designed to generate fresh and innovative results. Creative thinkers endeavor to develop ideas and solutions, investigate life, identify and scrutinize the implicit hypotheses of ideas, and interpret problems as challenges.

It is expected that the educational system will nurture learners who are thoughtful and creative and possess scientific insight, enabling them to comprehend the complex world. Thus educational programs must include methods that teach learners how to learn through intellectual discipline and apply this in their daily lives. (Zangeneh, Musavi & Badali, 2013).

All educational psychologists and experts agree that creative thinking abilities can be taught to individuals, especially children and adolescents (Saif, 2017). Rycards (1988) believes creative thinking can grow and develop more with training. In fact, creative thinking is not a fixed personality trait hidden in humans without change or development; rather, it is strengthened or weakened by influencing factors or obstacles. Accordingly, the shift in educational systems from merely offering instructional programs to those that cultivate creative thinking must be accompanied by changes from traditional learning methods to modern educational models (Amirtimori, Moradi & Rasooli, 2014). Researchers emphasize that the traditional system must be transformed and guided toward creative education (Cropley, 2008). In reality, there is a need for methods that foster qualities conducive to learning and creative thinking in learners (Shahali Zadeh et al., 2016). One of the traits related to creative thinking is wisdom. Creative and wise individuals tend to employ cognitive and emotional resources to approach life's unknowns (Helson & Srivastava, 2002).

Wisdom, with its ancient heritage, has always been respected. However, its examination as a scientific concept and the use of empirical methods for its study has only recently commenced. This has led to models attempting to encapsulate the diverse dimensions of this concept within a comprehensive framework (Ardelt, 2011). The results of the factor analysis on wisdom components from the conducted research indicate significant overlap among the proposed components of wisdom (Bangen, Meeks & Jeste, 2013). Thus, based on scientific studies, wisdom can be defined as a way of thinking, feeling, and behaving that positively affects one's own life and others, which

manifests within the fabric of life (Kord noghabi, 2020). One of the most recognized theoretical models in the field of wisdom is the Ardelt's model of three-dimensional wisdom, formulated based on research by Clayton and Birren (Clayton & Birren, 1980). This model defines wisdom as a personality trait where cognitive, reflective and affective dimensions are integrated (Ardelt, 2003). According to Ardelt, wisdom is cultivated through thinking and experience, encompassing cognitive, reflective, and affective aspects (Ardelt, 2012). The cognitive dimension involves an individual's understanding of life and desires to know the truth. Understanding phenomena, events, and their deeper meanings are among cognitive topics. The reflective dimension, a prerequisite for the cognitive dimension, refers to metacognition and skills in reflective thinking and examining events from multiple perspectives. The affective dimension includes experiencing positive emotions and compassion towards others and compassionate and empathetic behaviors, in contrast with indifference and the absence of negative emotions and behaviors towards others. According to Ardelt, all three dimensions of wisdom must be present in a person to be called wisdom (Thomas et al., 2017).

Regarding the relationship between wisdom and creative thinking, Sternberg (2009) demonstrated correlations between creativity, intelligence, and wisdom behaviors across various disciplines. Schmit (2012) also identified mental openness, imagination, and curiosity as one of the eight dimensions of wisdom. Le (2008) suggests that wisdom grows through positive and negative life crises creatively. Ghorbani and Yousefi (2018) showed a positive and meaningful relationship between wisdom

components such as emotional regulation, critical thinking, humor, and openness to experience with creative thinking.

Given the connection between wisdom and creative thinking, enhancing creative thinking through fostering wisdom is feasible. Researchers propose that wisdom should be integrated into regular classroom activities (Sternberg, Nusbaum & Gluck, 2019). This implies that schools, besides their usual educational tasks, should also plan for wisdom education, emphasizing students' wisdom (Sternberg, 2009). Society should take responsibility for facilitating students' wisdom growth through the educational system (Sternberg & Emily, 2019). Gluck, Sternberg & Nusbaum (2019) believe that amidst numerous challenges, knowledge cultivation in classrooms is not just an option but a necessity.

In fact, considering the rapid technological progress, the future raises many questions. Artificial intelligence transforms the world, and education is no exception, as educators face the challenge of preparing students for an ever-changing future. Teaching for wisdom as a solution can help us in this path (Henaine, 2024). In addition, in parallel with the fact that the development of creative thinking skills is considered the most important function of formal education, it can help students to have a greater sense of personal contribution to life and be able to contribute to life in a way that is useful for them and others and considering that scientists believe that cultivating creative thinking in a person is the result of active learning and avoiding passive states, in the present research, it has been attempted to design a Wisdom Training Protocol that has benefited from the three dimensions of Ardelt's wisdom theory, which are composed of some psychological components in the education

of wisdom; because the most important logic of educational interactions about wisdom is creating an effective base for emphasizing thinking. The Wisdom Training Protocol is not a set of rules that the teacher designs and then tells the students, but a type of thinking that students must apply and master (Sternberg, 2009). Thus, improving creative thinking skills as one of the essential elements of wisdom is considered one of the goals of this package.

Several wisdom education methods have been reported which have demonstrated the effectiveness of wisdom education through empirical evidence (e.g., DeMichelis et al. (2015); Bruya and Ardel (2018); Grossman (2017), the study of Bruya and Ardel (2018) and Grossman (2017) have shown effective empirical evidence; However, the cultivation of wisdom in the schools of Iran is currently nonexistent. Considering the impact of wisdom cultivation on human growth, societal progress, and aligning with today's global trends, neglecting wisdom education could hinder a country's progress alongside global advancement.

Although various studies have been conducted domestically and internationally on the relationship between wisdom variables and creative thinking, no research specifically examining the effectiveness of wisdom training based on Ardel's perspective on creative thinking in students was found. Therefore, this study aims to design and evaluate the effectiveness of a Wisdom Training Protocol based on Ardel's perspective on enhancing creative thinking among sixth-grade students.

Method

The current study employed a quasi-experimental pre-test/post-test design with a control group. The statistical population included all sixth-grade female students in District 4 of Tehran during the academic year 2023-2024. Thirty sixth-grade female students were recruited through a random sampling approach. Participants were then randomly assigned to two conditions: an experimental group and a control group (n=15 per group). Inclusion criteria consisted of studying in sixth grade and not receiving simultaneous wisdom training, written consent for participation in research, and expressed willingness to participate in the study. Exclusion criteria were more than two absences from the training sessions and reluctance to continue the wisdom training process. The research process began with ensuring confidentiality of information and obtaining full consent and willingness to participate from the students by research ethics. Initially, all groups were given a baseline pretest. Subsequently, the experimental group underwent 15 sessions of wisdom training based on Ardelt's wisdom approach twice a week for two months, while the control group attended regular school classes without any intervention. The intervention sessions in the experimental group were implemented by the first author at Maad Primary School in District 4 of Tehran during the academic year 2023-2024. After the intervention, a posttest on creative thinking was administered to both control and experimental groups.

Instruments

Runco Ideational Behavior Scale (RIBS)

The Ideational Behavior Scale (RIBS) is designed by Runco (2001) to assess creative thinking in individuals. Creative

ideation involves generating unique ideas when faced with open-ended problems. This questionnaire comprises 25 items, where respondents rate their agreement on a 5-point Likert scale. Scores range from 25 to 125; higher scores indicate more creative thinking, greater creative ideation, and, ultimately, higher creativity and innovation. This scale is based on the notion that ideas can be seen as products of original, divergent, and creative thinking. Runco found a reliability coefficient .92 using Cronbach's alpha in his study. This scale primarily describes actual behaviors (observable acts and activities) that clearly show an individual's use, appreciation, and skill with ideas. In the present study, after the initial translation and preparation, the questionnaire was given to 10 referents in this field to evaluate the necessity and relevance of the scale items and to calculate the content validity ratio (CVR) and content validity index (CVI) which ranges from .8 to 1. The content validity index ranges from .8 to 1, and CVR ranges from .7 to .9. For 10 experts, the minimum acceptable value is .72 for CVI and .62 for CVR (Gilbert & Prion, 2016), which indicates that the questionnaire has acceptable content validity and has high internal consistency (Cronbach's $\alpha=.85$). After obtaining the content validity and necessary permissions, the scale was used.

Wisdom Training Package

To design this training package, in the first stage, various theories, sources, and research in the field of wisdom training were studied, also articles and books related to wisdom and its training were reviewed (Daneshpayeh et al., 2023; Bracher, 2021; Bruya and Ardel, 2018; Grossman, 2017). Using the Thematic analysis method with Attride-Stirling (2001) design, based on the formation of the Thematic Network, the main

components of wisdom approved by contemporary wisdom theorists and derived from effective research results on wisdom education were selected, which include the components of Compassion, self-compassion, self-awareness, acceptance and control, emotion regulation, observing phenomena from different angles, critical thinking, and creative thinking. Then, this package was presented to 10 psychology experts to examine its validity to determine whether this training package has the necessary validity to target the dimensions of wisdom or not? To ensure the desirable validity of the training package, the content validity method was used, with two quantitative coefficients of content validity ratio (CVR) and content validity index (CVI). To measure the content validity ratio (CVR), the opinions of experts specializing in the field of the content of the package were used. Initially, the objectives of the training package were explained to the experts and then they were asked to classify the content of the training package based on a three-point Likert scale: the item is essential; the item is useful but not essential; the item is not necessary. After collecting the experts' views, the CVR was calculated. Also, the CVR index was extracted for each training session according to the content and time allocated. The minimum acceptable CVR level based on the number of 10 experts is .62, and the total CVR score calculated in all sessions of this study was higher than .70 for the components of this package, which indicates acceptable validity.

To calculate the CVI index, the three dimensions of "relevance", "simplicity" and "clarity" of this package were examined from the experts' point of view based on a 4-point Likert scale. Experts determine the relevance of each item from their point of view from 1 "not relevant", 2 "somewhat

relevant", 3 "quite relevant" to 4 "highly relevant". The simplicity of the item is also determined from: 1 "not simple", 2 "somewhat simple", 3 "quite simple" to 4 "highly simple," and the clarity of the item is determined from 1 "not clear", 2 "somewhat clear", 3 "quite clear" to 4 "highly clear" respectively. A total of ten experts in the field of psychology answered the questions related to the content validity index. To obtain the CVI index, we divided the number of people who chose options 3 and 4 by the total number of experts, which were ten. The minimum acceptable value for the CVI index, based on the number of 10 experts, is .79. The value of this index for the components of this package was .90 and higher, and finally, using the items with a desirable index, this package was developed in fifteen sessions. Table 1 summarizes the sessions of the wisdom training.

Table 1
Summary of Wisdom Training Protocol based on Ardel's Perspective

Session	Dimension	Content & assignments
Session 1		Objective: Welcoming and introduction, establishing rapport with students, dividing students into experimental and control groups, conducting the pretest, and familiarizing students with the intervention program.
Sessions 2 and 3 Compassion	affective	Objective: Familiarizing with the importance of compassion skills, teaching growth techniques, and developing compassion skills. Method: - Reading the story 'Compassionate Friends' and performing it by students, discussing its concepts in groups, and relating them to everyday life experiences. - Writing about what they expect from friends and what friends expect from them

Sessions 4 and 5 Self-Compassion	affective	Objective: Familiarizing with the importance of compassion and self-compassion practice, teaching techniques for developing self-compassion. Method: - Teaching mindfulness techniques and stages. - Writing a compassionate letter to oneself with a self-acceptance approach. - Performing the empty chair technique in the form of role-playing.
Sessions 6 and 7 Self-Awareness	Reflective	Objective: Familiarizing with self-awareness skills and conducting exercises to gain self-awareness skills. Method: - Students create a vision board by adding words or images that symbolize their goals. - Listing strengths and weaknesses and discussing them. - Answering questions about their specific characteristics and selecting three appropriate words to describe themselves.
Session 8 Acceptance and Control	Dimension: Reflective	Objective: Familiarizing with acceptance and control skills and identifying situations. Method: Writing about things they are grateful for and about challenging issues they have faced. Then ask them if they have control over them, think about improving them; if not, help them accept the ones they don't have control over.
Sessions 9 and 10 Emotion Regulation	Reflective	Objective: Familiarizing individuals with emotions and their messages, teaching emotion regulation and management skills. Method: - Use cards from the "Little Bear's World" and ask questions about different emotions on these cards. Reading stories from a Persian book to discuss emotions and share opinions, refining them. - Recording events during the past week on an emotion identification exercise sheet, answering questions about emotions, sharing them in groups, attempting to replace confrontational thoughts, and recording enjoyable activity forms.

Session 11 Viewing Phenomena from Different Angles	Reflective	Objective: Familiarizing individuals with perspectives, teaching viewing phenomena from different angles. Method: - Choosing a controversial topic where there is no agreement. - Dividing students into agree and disagree groups, presenting evidence and documents by group members for their views. - Switching agree and disagree members and attempting to present evidence in the new situation.
Session 12 Critical Thinking	Cognitive	Objective: Familiarizing with critical thinking skills and characteristics of critical thinkers, conducting exercises to improve critical thinking. Method: - Reading the story 'The Sound of Sparrows' from the sixth-grade Persian book and asking questions about it, analyzing and discussing the story, and encouraging students to express their opinions and discuss them.
Sessions 13 and 14 Creative Thinking	Cognitive	Objective: Teaching creative thinking and creating new responsible behaviors to achieve goals. Method: - Presenting proverbs from a Persian book to students in groups and illustrating them through images by students. - Using discussions on Persian literary arrays for fostering creative thinking, presenting an example of a simile array where only its first part is specified and completed by students. - Imaginary journey to the time and place of one of the memorable characters from Persian literature sixth grade and asking questions about his life and work and discussing and examining students' experiences in this journey. - Going to the schoolyard, carefully observing the surrounding environment, and presenting a report on the different uses of objects around
Session 15		Review and summary of sessions and post-test implementation

To analyze the data, covariance (ANCOVA) analysis was conducted using SPSS software version 26. Before performing any statistical test, it is essential to check the fundamental assumptions of the test. In this context, the basic assumptions of

ANCOVA were first examined. The first assumption is the normal distribution of the research variables. To assess normality, skewness and kurtosis indices were used. The findings indicated that in both the experimental and control groups, the skewness and kurtosis values ranged from -2 to 2 at both the pre-test and post-test stages. Another essential assumption for performing ANCOVA is the homogeneity of dependent variables within each group. Levene's test was used to test this assumption. Confirming that this condition is also, indicating that this condition is also met. Additionally, an examination of the regression line slope indicated that the significance level for the variable group pre-test creative thinking was .80 (greater than .05), thus satisfying this assumption.

Results

As noted, Sixth grade female students in district 4 of Tehran were selected through convenience sampling. Thirty sixth-grade students were divided into experimental and control groups (15 students in each group). Because all the students were girls and in the sixth grade, there was no variability in grade and gender. To test the research hypotheses, mean and standard deviation were utilized in the descriptive statistics section, and ANCOVA was employed in the inferential statistics section due to the research's aim. The Levene's test was used to check the homogeneity of variances.

Table 2
Levene's Test of Equality of Error Variances

F	df1	df2	Sig.
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1.826

1

28

.187

According to data in Table 2, The results of Levene's test for assessing the variance of the dependent variable in the groups for the creative thinking variable demonstrated that the significance level was above .05 ($F=1.82$, $P=.18$). Hence, this condition is confirmed. The descriptive statistics, including mean and standard deviation, are presented in Table 3.

Table 3
Mean and Standard Deviation of Research Variables in the Experimental and Control Groups in Pretest and Posttest Stages

Variable	Group	Mean $\pm$ SD	
		Pre-test	Post-test
Creative thinking	Experimental	69.93 $\pm$ 5.94	88.33 $\pm$ 7.33
	Control	66.46 $\pm$ 3.22	66.40 $\pm$ 3.92

As indicated in Table 3, the experimental group exhibited a significant difference in scores between the post-test and pre-test phases, whereas the control group did not show a notable change in their scores. To assess these differences' significance, covariance (ANCOVA) analysis was utilized. The results are presented in Table 4.

Table 4
Results of Covariance Analysis of Research Variable

Source of variation	Sum of squares	df	Mean squares	f	sig	Partial eta squared (η^2)
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Creative thinking pre-test	826.17	1	826.17	156.25	<.001	.85
Group	2129.49	1	2129.49	402.76	<.001	.93
Error	142.75	27	5.28			
Total	184145	30				

Table 4 indicates that the pre-test scores of creative thinking (covariate variable) significantly impacted the dependent variable. In other words, individuals' scores in pre-test creative thinking significantly influence individuals' post-exam grades and effective intervention execution. The partial eta squared (η^2) for this factor was determined to be .85, indicating that this factor accounted for 85% of the variance in the dependent variable. Furthermore, the group section of Table 3 reveals a significant difference between the control and experimental groups, suggesting the effectiveness of the intervention. The partial η^2 also indicates that %93 of the variance in the dependent variable was attributable to the intervention. Finally, with an adjusted R^2 value of 0.96, the current model (pre-test score and intervention effect) can collectively predict %96 of the variance in the dependent variable.

Discussion

This study aimed to explore the effectiveness of a Wisdom Training Protocol based on Ardel's perspective on enhancing students' creative thinking. The research findings demonstrated that this package led to increased creative thinking in the experimental group compared to the control group. In addition, the impact of wisdom was investigated on different factors such as students self-directed learning (Daneshpayeh et al., 2023),

Psychological Capital (Karimi, 2022), Spiritual Health (Shoghi, Robatmili & Nasrollahi, 2022), Resilience & Social Skills (Hashemi Garm Darreh & Yousefi, 2022), Psychological well-being & academic vitality in students (Zabihi Hesari, Chaji & Zare Moghadam, 2017).

The results of this research are similar to the results of Ashouri, Bahari & Namvar (2023), Mohammadi & Shoghi (2021) & Ramdani et al. (2021). These studies have shown that wisdom and thinking have a positive relationship, and wisdom education can promote creative and critical thinking in individuals. Furthermore, the results of this study are consistent with studies conducted by Peters & Green (2024), which showed the necessity of using wisdom education in support of individual and collective thinking capacities in the age of AI education. In addition, this study aligns with the findings of Bruya and Ardelt (2018), demonstrating that wisdom education enhances the capacity for complex and unrelated thoughts by challenging students' thoughts. Furthermore, these results are congruent with the research conducted by Sternberg, Reznitskaya & Jarvin (2007), which showed that integrating wisdom education into the curriculum promotes students' critical, creative, and practical thinking. Moreover, Kerr and Gagliardi (2003) explored the teachability of creative thinking and asserted that creative thinking can be taught. Additionally, Lipman (1982) focuses on enhancing critical and creative thinking through early childhood wisdom education programs. In his educational model, this type of thinking is valued and seen as trainable through systematic practice.

To elucidate these findings, it can be argued that in wisdom education, students are encouraged to exhibit empathy, consider

different perspectives, regulate emotions, engage in critical thinking, and foster curiosity and sensitivity to issues, traits typical of creative individuals.

Empathy, as a key component of wisdom (Ardelt, 2012), correlates positively with creative thinking. Expanding empathy in wisdom education involves engaging individuals with diverse viewpoints and ideas in class. Thoughts and ideas are not threatened in the classroom; their learning is supported. This responsibility and empathy create conditions for individuals to engage in creative thinking (Javdan, 2022). It can be said that in wisdom education, the cooperation of students is increased, and empathic relationships are established between them so that their minds become more open about issues, and the growth of creative thinking is done in an ethical framework. The results were consistent with previous studies (Ahmadi, Samadi & Minaee, 2018; Ghorbani & Yousefi, 2018).

Emotional regulation, another key aspect of wisdom, shows a significant and positive correlation with creative thinking. Wisdom individuals experience a rich and diverse emotional life, and creative thinking coupled with innovation necessitates emotional control to delay success. Thus, wisdom individuals, through understanding, controlling, and timely expression of their emotions and self-regulation against internal and external factors, pave the way for new and creative ideas (Webster, Westerhof & Bohlmeijer, 2014). Previous studies confirm the results of this research (Aghili & Ahmadi, 2022; Moradi & Parandin, 2020).

Furthermore, as one of the key attributes of wisdom, critical thinking is among the most influential variables affecting creative thinking. To clarify these results, it can be stated that

reflection, evaluation, and possessing a critical perspective are essential for transforming significant life experiences into wisdom. Simply accumulating experiences is insufficient for wisdom; rather, wisdom individuals reflect on their experiences (Sternberg et al., 2019). Therefore, through promoting and developing wisdom and subsequently teaching critical thinking, creative thinking among students can be enhanced. In fact, this method increases a person's intellectual capacity and creative thinking. The results were consistent with previous studies (Yousefizadeh & Aqaie Moqaddam, 2024; Kavianfar & Baezzat, 2022).

Additionally, it is crucial to support the growth of wisdom because of its implications for how individuals are educated. Maxwell (2019) argues that we need a revolution in educational goals and processes. Schools need to incorporate wisdom education into their programs, teaching methods that empower students to engage with issues they encounter in everyday life rather than merely storing facts (Sternberg & Emily, 2019).

The findings of this research have both theoretical and practical implications. The results can contribute to the scientific body of knowledge on psychological wisdom and also convey important messages to educational policymakers to prioritize the growth of wisdom as a fundamental goal of education and foster creative thinking by creating enriched learning environments. The wisdom education program aims to cultivate creative thinking through ethical and desirable means considering essential components of wisdom. In fact, creative thinking nurtured through wisdom serves humanistic goals, something our society and time desperately need. We hope this marks a beginning.

Generally, every study may encounter certain limitations and this study is no exception. It faced limitations such as the lack of a follow-up period and the failure to account for potential variables like age, gender, and socio-economic status. In addition, this study was conducted solely on sixth-grade female students in a Tehran elementary school. Accordingly, caution should be exercised in generalizing its results. One limitation of this study was incorrect responses to the items from some participants, which could partially affect the results.

Given that the pre-test was administered in both the control and experimental groups, it cannot affect the final result of administering the independent variable only in the experimental group, and also, given that there was no dropout or withdrawal of participants in the study, the dropout of the subject did not affect the internal validity. Therefore, considering the above, the research findings are generalizable.

Furthermore, data collection in this study relied solely on questionnaires. Therefore, it is recommended that future research employ additional data collection methods, such as interviews, to obtain more precise results. It is recommended that researchers in future studies include follow-up periods to assess the sustainability of the effects of wisdom education on creative thinking across different educational levels and on samples comprising boys.

The findings of this study indicate that Ardel's wisdom training program significantly impacts students' creative thinking and leads to its improvement. Based on the research findings, it is recommended that teachers first study and master the skills necessary for wisdom themselves and then impart them to learners during education to foster creative thinking

through wisdom. Hence, organizing training courses on this approach for teachers and educational specialists can be beneficial. Educators can enhance students' creative thinking by employing wisdom-based teaching methods.

Ethical Considerations

In this research, the ethical standards were carefully observed and the general principles of the research were explained to the participants, the participants were assured that their personal information would remain confidential and the principle of professional confidentiality and participant protections would be fully implemented. This study was approved by the Ethical Committee of University of Mazandaran with the code of IR.UMZ.REC.1403.035. Also, written informed consent and school approval were obtained from the participants and school.

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