

Effect of Mindfulness Training on Citizenship Behavior and Social Well-Being of Delinquent Teenagers

Abstract

This research investigated the effectiveness of mindfulness training on delinquent teenagers' social well-being and citizenship behavior because delinquency among teenagers is a social problem that can create insecurity and disorder. On the other hand, teenagers are at the age of socialization and can be reformed and trained. The research design was quasi-experimental in the pre-test and post-test follow-up method with the control group. This study's statistical population included all the prisoners of the Birjand Correctional Center between the ages of 15 and 18 in 2021. According to the study's criteria, 50 were randomly selected and placed in two experimental and control groups. The experimental group experienced mindfulness training for eight 90-minute sessions, and Tabash's citizen behavior form (2013) and Keyes' social well-being questionnaire (1998) were used. The data were analyzed through the analysis of the covariance test. The results showed the effectiveness of mindfulness training on increasing citizenship behavior in the post-test and follow-up stages ($p < 0.001$) and social well-being in the post-test ($p < 0.001$) and follow-up stages ($p < 0.05$). Mindfulness increases citizenship behavior and social well-being by accepting and experiencing emotions, creating self-awareness, and avoiding the automatic thinking pattern. It can also be used as training to empower and improve their life quality.

Keywords: *mindfulness, citizenship behavior, social well-being, delinquency*

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Introduction

In today's societies, personal and social issues and problems such as; personal and social trauma and citizenship issues have also increased due to the rapid growth of technology and increased social ties. Today, society's problems are mainly a reflection of individual problems and abnormalities that have emerged (Saroostani, 2013).

Societies' moral, cultural, economic, and political growth and development are undoubtedly achieved without delinquency and crime. Teenagers' delinquency is one of society's essential issues for two reasons. First, teenagers are at the age of socialization; therefore, it is possible to reform and train them. Second, teenagers are an important part of the human capital in each society. Similarly, they are more exposed to delinquency and victimization than other groups in society (Tavasoli, 2015).

We have to be aware of why a specific behavior is performed at a specific time, under a specific consequence, and by a specific person to understand risky and delinquent behaviors. This point refers to the functional role of delinquent behaviors. According to Lloyd-Richardson, Perrine, Dierker & Kelley (2011), the intrapersonal function is one of its vital aspects that performs in two ways: automatic negative reinforcement and automatic positive reinforcement. They believe that delinquent behaviors may act as automatic negative reinforcement to stop or eliminate negative emotional and cognitive states (getting rid of failures, reducing emotional pain, expressing anger towards others, and reducing tension) or automatic positive

reinforcement, which refers to the use of delinquent behavior to create certain internal states. In addition, the person's external environment sets the social functions of delinquent behaviors. Positive social reinforcement is delinquent behavior to gain attention or obtain specific social resources. Negative social reinforcement refers to delinquent behaviors to escape from some personal duties or tasks. Escaping from military service and leaving home represents the function of negative social reinforcement of delinquent behavior (Fischer & Peterson, 2018). Therefore, it is necessary to pay attention to the functional role of these behaviors in the environment to understand **teenagers' delinquency**. Delinquency may act as automatic positive reinforcement to create pleasant internal states, such as increasing dopamine release, or automatic negative reinforcement to stop or eliminate undesirable emotional and cognitive states (such as reducing pain and expressing anger towards others).

Social factors have a fundamental and influential role in the emergence of delinquency and social harm. Individuals, the family, and society form a triangle; behavioral disorders can cause damage and many problems in society (Sotoudeh, 2012). A person knows himself and becomes aware of his existence in social life and interaction with others. The person's self-awareness has other dimensions formed in his relationship with various and complex environments, such as the psychological and physiological environment, the natural environment, the social environment, and the cultural environment. Therefore, his self-awareness has many circles, such as awareness of one's

existence, awareness of belonging to a certain group, stratum, or nationality, and awareness that he belongs to a certain city, region, or natural geography, all of which will play a significant role in his social well-being (Rashidi, 2013).

Social well-being is related to a person's social awareness. Keyes (1998) defines social well-being as people's self-report of the quality of their relationship with others. Keyes and Shapiro's (2013) multifaceted model of social well-being involves five aspects that determine people's optimal functioning level in their social performance. Keyes finds that the five elements of social well-being, coherence, integration, acceptance, participation, and actualization, are related to mental health. He believes that others' recognition and acceptance are the elements of acceptance and value of the individual as a social partner, sharing efforts, and end of belief in positive social transformation and social well-being actualization. These elements can evaluate social unity, joint efforts, social integration, and a sense of capacity for the continuous growth of society and the level of comfort of people in accepting others. They also suggest the presence or absence of mental health (Keyes, 2013).

For the first time, Beloc & Berslo (1972) argued about the concept of social well-being. They synonymized social well-being with the "society members' performance level" and created the social well-being index. They made an effort to have individual activity and performance levels in a society by posing various questions about individual health's physical, mental, and social dimensions. Doonald et al. proposed this concept a few years later, in 1978, and they argued that health is more than reporting disease symptoms, disease rates, and functional capabilities of people. In their opinion, social well-being is a part of health status and can be its function. The social well-being content was originally measured through a focus on the "person" and in relation to personal interactions (e.g., meeting friends) and social participation (e.g., membership in groups). Objective elements (such as the number of friends) and subjective elements (such as the quality of friendships) were defined in their measurements. Social welfare from 1995 onwards has a general attitude on the quality of health among all people. It also includes broader areas such as the importance of belonging to the land, culture, spirituality, ancestry, family, and society, and how they mutually affect people directly related to citizenship behavior (Clelland, 2007).

Citizenship behavior has been discussed for a long time and has evolved in different eras and societies. The historical and conceptual background of theoretical citizenship topics is related to the political-social thought of Plato, Socrates, and especially Aristotle in the book *Politics* in Ancient Greece, Stoics, and Christian philosophers, especially Augustine and

Aquinas in the Roman and Middle Ages and more coherently in the social-political thought of Machiavelli, Hobbes, Locke, Rousseau, Kant and Hegel in the Renaissance period (Tavasoli, 2014).

The concept of citizenship behavior involves civility and progress and has been discussed and investigated from different perspectives by different philosophical, political, and legal schools. In addition to the political contexts, it supervises the moral relations between the members of the society and the traditional theoretical issues of sociology, such as unity conditions and social solidarity. There has always been a close relationship between ethics and moral relations in investigating and studying citizenship behavior. Sociology also has a functionalist approach to this issue -citizenship ethics- (Tavasoli, 2015).

Based on the introverted functionalist approach, citizenship behavior mainly discuss the functional analysis of the normative construction of ethics that shapes citizens' behavior. In this approach, citizens' behavior is cultural and moral values and norms, organizing and guiding citizens towards actions and interactions and preventing their deviation (control function). This approach's basic assumption and foundation is wide compliance with the norms of citizenship behavior and ethical relations among citizens, which controls citizens' mental and intellectual prejudices and the disappearance of their resistance to the correct patterns of citizenship behavior. This issue ultimately leads to the growth and expansion of the knowledge of citizenship behavior and social cohesion achievement. Attention centered on the internal relations and interaction of citizens and communication networks within ethics, culture, and the "citizen community" interprets it from the internal functionalist approach to the "interaction" approach. Based on the "interaction" approach, citizenship behavior is highly interactive. The development of ethics and culture and the change in citizenship interests are related to the citizen's network activities, and the interaction between citizens follows the society's cultural norms (Esaadi, Nadafi, and Sharifi, 2016).

There is a wide range of citizenship social theories, but the sociological definition of citizenship behavior is about emphasizing citizenship rights and duties, citizenship participation, citizenship equality, citizenship identity, and the citizenship base role regardless of the social, class, ethnic, racial and religious affiliations of the members of the society. Classical sociologists such as Tonnies, Durkheim & Weber believe in membership identity and a new rational, customary, and civil commitment for society members in the form of citizenship behavior which leads to democratic political, social and cultural participation and a greater sense of social belonging to the society. In this case, social cohesion and social order are finally strengthened (Tavasoli, 2014).

Durkheim states that crimes, delinquency, and violation of norms are dominant when the citizens' behavior weakens. Therefore, people's surroundings can affect their behavior. Some social environments encourage illegal activities, called chaotic social environments. These areas transfer criminal behavior more commonly than in other areas. Big cities' suburb with cultural conflict is a clear example. Children living in socially disordered areas are more likely to become delinquent than those living in stable environments because these children have more opportunities to face those who have delinquent values. In addition, they have fewer opportunities to learn citizenship behavior components, including legal positivism and weaker environmental attitudes (Abol Ma'ali, 2010).

The experimental test of mindfulness and its applications have been introduced as one of the most influential factors in social health and well-being due to its efforts in the past years. Carmody, Bear & Ngtsans (2020) studies indicate the effectiveness of mindfulness training. Mindfulness-based relationship enhancement training and Mindfulness-based stress reduction can reduce pain, reduce symptoms, and increase social well-being in clinical populations with various health conditions.

Mindfulness allows people to perceive thoughts and events as they are and avoid judging them critically (Brown, 2007). Therefore, mindfulness training helps people release the pressure of automatic thoughts and unhealthy behaviors and increase self-regulated behavior (Ryan & Deci, 2001). In explaining the relationship between mindfulness and social well-being, the self-determination theory (Ryan and Desi, 2001) mentions the attention role, which forms the mindfulness core.

Mindfulness-based interventions have positive effects on increasing positive emotions and reducing negative emotions (Schroevers, 2016), reducing negative behavior patterns and automatic thoughts and regulating positive behaviors related to health (Brun, 2014), improving mood, decreasing depression and anxiety (Zeidan, 2015) and increasing psychological adaptation (Bohlmeijer, Prenger & Taal, 2016).

Mindfulness has a positive and significant relationship with social, psychological, and emotional well-being (Karmadi, Bir, 2017) and the conscientiousness personality factor (Boyce, 2016). In addition, it has a significant negative relationship with emotional failure (Teixeira & Pereira, 2017), negative emotions like worries (Fisak, 2015), and the neurotic dimension of personality (Pidgeon, 2016). The limited studies show that mindfulness-based interventions have played an influential role in improving anxiety and increasing self-expression and self-regulation abilities through exercises focusing on internal attention, such as awareness of breathing, or focusing on external objects, such as sounds, during

mindfulness exercises. Mindfulness-based interventions can immediately shift attention from irrelevant worrying thoughts in the present moment to a non-judgmental perspective toward thoughts, feelings, and behaviors during mindfulness exercises (Hagiwara, 2014).

According to Kabat-Zinn (2013), mindfulness training by combining relaxation and mindfulness meditation is one of the treatment methods based on stress reduction and psychotherapy. This method is taught through breathing and thinking, in which the mental representation of objects in life is beyond the immediate control of humans. Mindfulness meditation has improved social well-being (Serretti, 2013), sleep quality (Biegel, Brown & Shapiro et al., 2009), and overall life quality in clinical populations (Foley, 2010). The positive effects of mindfulness meditation in a non-clinical population include a decrease in negative emotions (Delgado, L. C., Guerra, Perakakis, Vera, et al., 2014), increased hope for goal achievement (Farb, 2010), positive emotions and life satisfaction, and increased social bonds (Gross, 2014) and intimate communication quality (Desrosiers, Vine & Klemanski et al. 2016).

Mindfulness training attracts teenagers to two fundamental aspects of citizenship behavior: getting closer to others and strengthening the spirit of participation, and staying away from risky behaviors, delinquency, and breaking the law. Mindfulness also promotes citizenship behavior in teenagers by examining the life story, identifying values, and following the values (Tan and Martin, 2017). Castro & Armario (2015) showed that mindfulness training in delinquents increases the sense of connection and empathy towards others and also improves citizenship behavior. Due to their low level of empathy, they do not have the necessary interest and capacity to understand that others suffer from their actions to avoid aggression. In another research, Gravand (2014) showed that mindfulness skills could change people's attitudes toward drug use, especially at-risk teenagers, and reduce their tendency to use drugs. It is noted that people's attitude towards a subject is derived from the amount of knowledge they have about it. Teenagers get a relatively positive attitude towards these drugs when they live in high-risk areas that receive only incomplete information; in addition, most of that information is wrong and emphasizes the deceptive aspects of drugs.

As mentioned, awareness or knowledge is the common feature between social well-being and citizenship behavior because each expresses human awareness aspects in the social environment. It is essential to be familiar with mental or cognitive skills to control, change or create any of these concepts. The cognitive learning perspective emphasizes the cognitive mediators in forming attitudes. These perspectives pay attention to reasoning quality, thinking, processing

information, training skills to change and create attitudes, and cognitive processing. This approach presents methods such as education, awareness, commitment, and agreement to change the attitude (Crane, 2010). Therefore, different training can create and change citizenship behavior and social welfare (Wells, 2016). This research mainly discusses "what effect does mindfulness training have on the citizenship behavior and social well-being of delinquent teenagers?"

Literature review

attitude and negative Schmertz & Anderson (2020) investigated the role of mindfulness-based therapy in social anxiety. They found that this intervention could effectively reduce rumination, and ineffective spontaneous thoughts, improve behavioral abnormalities such as aggression and substance abuse, adjust social anxiety and improve social acceptance.

Garland (2020) studied the relationship between moral intelligence and mindfulness with students' social well-being and showed that moral intelligence and mindfulness could positively and meaningfully predict students' social well-being. In addition, Garland found that mindfulness helps people to adjust negative behavior patterns and automatic thoughts and regulate positive behaviors related to health.

Bowen & Enkema (2019) conducted a study entitled the effectiveness of mindfulness training in improving the citizenship behavior and Legal positivism of at-risk teenagers. They indicate that mindfulness-based education reduces the possibility of engaging in risky behaviors and improves the citizens' welfare by reducing teenagers' sensationalism and increasing their awareness of each behavior's consequences.

Baer (2017) examined the relationship between mindfulness training and social well-being and found that people with higher mindfulness report less stress and emotional pressure in response to the conflict in the relationship and discuss the existing contradiction with anger. In addition, the research findings showed an inverse relationship between mindfulness and anxiety and a direct relation between mindfulness and the ability to act consciously in social situations.

Marlatt & Gordon (2016) studied the effectiveness of mindfulness training in addiction treatment. They reported that mindfulness practitioners learn to detect the transient nature of addictive desires and develop the ability to neglect them without wanting to fulfill them immediately. Consequently, they engage less in risky and delinquent behaviors.

Hosseini et al.(2018) investigated the effectiveness of mindfulness training on citizenship behavior and self-harming behaviors in teenagers at the correction and education center. They concluded that the experimental group's intrapersonal (automatic negative and automatic positive reinforcement) and interpersonal (negative social reinforcement and positive

social reinforcement) functions of self-injurious behaviors decreased. The scores of legal positivism, self-control, and spirit of participation in the experimental group also improved compared to the control group.

Kazemi and Keshavarzian (2018) investigated the role of mindfulness training in problem-solving and social well-being. They showed students with higher mental health and social well-being when they were aware of their thinking in dealing with problems.

Narimani et al.(2017) compared the effectiveness of mindfulness and emotion regulation training on the mental health of chemical veterans. The results showed that the mean scores of physical symptoms, anxiety, depression, and impairment in social functioning in the experimental groups have significantly decreased compared to the control group in the post-test and follow-up. The results also show the effectiveness of mindfulness and emotion regulation training in improving mental health and chemical veterans' social well-being

Habibi (2017) studied the effectiveness of mindfulness therapy on the social well-being of drug abusers (opium) and found that mindfulness training in the experimental group significantly increased the scores on social well-being scales.

Sharafatipour (2015) investigated the social and economic characteristics of female criminals using a survey method with a sample size of 150 female criminals in Tehran (75 people from the crisis intervention center related to the well-being of Tehran province and 75 people from street women with history in the city and parks of Tehran). The results showed a relationship between social acceptance and adaptation (components of social well-being), family violence, legal positivism, and seeking participation (components of citizenship behavior), and women's delinquency.

Ahmadvand et al. (2014) defined social well-being based on the components of mindfulness. They found a positive and significant correlation between social well-being and the total mindfulness score. It was also concluded that increasing mindfulness was associated with increasing social well-being.

Karimi et al.(2014) investigated the relationship between emotional regulation components and citizenship behavior dimensions. The results showed that among the components of emotional regulation, self-awareness, spontaneity, empathy, and social skills had a positive relationship with citizenship behavior.

Research Methodology

The current research was semi-experimental with pre-test-post-test and follow-up stages with the control group. The study's statistical population included all prisoners aged 15 to 18 in Birjand city in 2021. The statistical sample also included

participants from teenage prisoners (358). Fifty people were selected from the community as available sampling and were randomly divided into an experimental group (25 people) and a control group (25 people). The experimental group and the second group (control) received no intervention during the mindfulness training intervention stage. Citizenship behavior and social well-being questionnaires were performed again as a post-test three months after the end of the training.

Social well-being test

Keyes' social welfare test (1998) is a questionnaire with 33 questions. Keyes prepared it based on his theoretical model of social welfare structure. He has empirically confirmed the 5-dimensional model used in his questionnaire through two studies on two samples of 373 and 7882 people in America using factor analysis. In this scale, six items are related to the social participation factor, seven are related to social coherence, seven are related to the social acceptance factor, six are related to the social integration factor, and seven are related to social actualization.

In Iran, Heydari (2011) conducted the standardization and validity of the test on 632 students. Internal consistency and retesting methods were used to check the validity of the social well-being questionnaire. Cronbach's alpha was calculated separately for male and female students and all participants to check the internal consistency of the questionnaire. The test-retest method was used to estimate the initial validity of the questionnaire, and the questionnaire was first performed on 35 people. In addition, the questionnaire was re-performed on the same 35 people after two weeks, and the Pearson correlation coefficient was 0.824 at a significance level of 0.0001. Cronbach's alpha coefficient of the social well-being questionnaire was 0.761 for all subjects, 0.775 for male students, and 0.75 for female students.

Citizenship behavior test

Tabesh (2012) designed the citizenship behavior questionnaire with 18 questions in the form of 4 dimensions: legalism, participation spirit, responsibility, and self-confidence. Two professors of the Department of Social Sciences at Payam Noor University confirmed this questionnaire's face validity in the thesis of Tabesh (2012). In addition, Cronbach's alpha for the citizenship behavior questionnaire in the legalism dimension is 0.71., participation spirit 0.59, responsibility 0.66, and self-confidence 0.68.

Mindfulness training package

Kabat-Zinn introduced mindfulness in the 1970s after establishing a stress reduction clinic at the Massachusetts Medical Center. In the late 1980s and early 1990s, a new approach called cognitive-behavioral therapy emerged from

combining behavioral and cognitive therapy. It has the most findings based on empirical evidence in psychotherapy (Segal, Williams & Teasdale, 2017).

In 1991, Barnard and Teasdale created a multilevel theory of mind called Interacting Cognitive Subsystems, or ICS. The ICS model is based on Barnard and Teasdale's theory that the mind has multiple facets responsible for processing new information cognitively and emotionally. Barnard and Teasdale's theory states that a person's vulnerability to depression is related to how much a person relies on one aspect of the mind and accidentally stops other aspects. The mind has two main aspects, including the aspect of doing and being. The aspect of doing is also known as the driven aspect. This aspect is goal-oriented and is activated when the mind finds a gap between what is and what is preferred. The aspect of being is the second aspect of the mind. It does not focus on achieving a specific goal but on accepting and allowing what is without immediate pressure to change it. Metacognitive awareness is the main component of the ICS model. Metacognitive awareness means that a person can experience negative thoughts and feelings as events pass through the mind's veil instead of being part of himself. People with high metacognitive awareness can easily avoid depression and negative thinking patterns when stressful situations occur. Metacognitive awareness is generally through one's ability to become unfocused. Decentering is the ability to perceive thoughts and feelings as unstable and observable events in mind (Segal, Teasdale, and William, 2012).

Barnard and Tizdel's model shows that mental health is related to the person's ability to release from conflict with one aspect of the mind and move between different aspects. Therefore, based on environmental conditions, people who can move flexibly from one aspect to another aspect of the mind are in the best condition. The ICS model states that the being aspect is the most appropriate aspect of the mind because it leads to lasting emotional change. Therefore, cognitive therapy should develop this aspect of the mind to prevent the recurrence of depression. This comment helped Tizdel to create mindfulness-based cognitive therapy, a method that develops the being aspect.

Zindel, Segal, and Williams also played a role in creating this treatment method. Their theory was based on the mindfulness-based stress reduction program developed by John Kabat-Zinn. Mindfulness-based cognitive therapy combines cognitive-behavioral therapy with mindfulness. The UK National Foundation for Clinical Excellence now presents mindfulness-based cognitive therapy as the "elected treatment" for recurrent depressive disorder. It can be said that people's works, such as Linehan (2013) and Kabat-Zinn (1990), had a role in forming the third wave of behavioral therapy in the early 1990s in the field of psychotherapy. Mindfulness-based treatments and

acceptance are the cognitive-behavioral third-wave treatments (Golpour, 2016).in table 1.

Table 1: Content of mindfulness training sessions

Meeting	Period	Title
First session	2 hours	Stating the introduction, knowing the group members, and determining the main goals
Second session	2 hours	Teaching meditation and mental focus on pleasant social experiences
Third session	2 hours	Focusing on pleasant social experiences through meditation
Fourth Session	2 hours	Focusing on positive citizenship behaviors through meditation
Fifth meeting	2 hours	Mental focus on broader areas of life (citizen behavior) through meditation
Sixth session	2 hours	Mental focus on experiences of lawfulness through meditation
Seventh session	2 hours	Mental focus on social participation through meditation
Eighth session	2 hours	Focusing on the experiences gained in the training course through meditation

Research findings:

Table 2 shows the statistical characteristics of the variables based on the citizenship behavior scores and their components by the group.

Table 2: Average and standard deviation of citizenship behavior and its dimensions in the pre-test, post-test, and follow-up of two groups

Variables	group	Implementation stage	Mean	The standard deviation
Legalism	Experiment	pre-exam	66.14	33.3
		post-test	73.15	76.2
		Follow up	8.15	89.1
	Control	pre-exam	6.12	22.4
		post-test	06.13	93.3
		Follow up	6.12	18.3
The spirit of participation	Experiment	pre-exam	33.12	79.1
		post-test	33.14	23.1
		Follow up	8.14	08.1
	Control	pre-exam	26.12	21.3
		post-test	46.12	92.2
		Follow up	46.12	41.2
responsibility	Experiment	pre-exam	73.9	93.3
		post-test	26.13	21.2
		Follow up	8.13	89.1
	Control	pre-exam	93.11	73.2
		post-test	4.11	38.2
		Follow up	33.11	91.2
Self-confidence	Experiment	pre-exam	93.70	77.8
		post-test	46.85	05.6
		Follow up	86.87	87.3

Control	pre-exam	8.72	94.15
	post-test	4.73	74.14
	Follow up	26.72	25.14

As shown in Table 2, there was little difference between the experiment and control groups in the pre-test stage. There is a difference between the experiment group and the control group in the post-test phase (the average scores of the experiment group were higher than the control group). The difference between the experiment and control group increased compared

to the pre-test stage. In addition, the experiment group showed improvement compared to the control group. In the follow-up phase, the citizenship behavior scores of the experimental group increased after receiving training and were higher than the control group.

Table 3: Mean and standard deviation of social well-being and its dimensions in the pre-test, post-test, and follow-up of two groups

Variables	Group	Implementation stage	Mean	The standard deviation
Social participation	The experiment	Pre-exam	66.77	08.23
		Post-test	2.83	23.12
		Follow up	83.87	71.10
	The control	pre-exam	86.65	69.14
		Post-test	13.67	26.15
		Follow up	73.65	26.15
Social integration	The experiment	Pre-exam	06.19	37.6
		Post-test	6.22	39.5
		Follow up	26.23	89.4
	the control	Pre-exam	86.18	34.4
		Post-test	2.19	21.4
		Follow up	06.19	88.3
Social acceptance	The experiment	Pre-exam	13.9	66.3
		Post-test	26.10	98.2
		Follow up	11.53	87.2
	the control	Pre-exam	66.8	28.2
		Post-test	93.8	76.2
		Follow up	73.8	71.2
Social coherence	The experiment	Pre-exam	93.23	92.4
		Post-test	26.25	02.4
		Follow up	33.25	69.3
	The control	Pre-exam	4.20	64.5
		Post-test	6.20	56.5
		Follow up	06.20	39.5
Social actualization	The experiment	Pre-exam	06.16	39.3
		Post-test	53.17	06.2
		Follow up	06.18	08.2
	The control	Pre-exam	86.11	42.4
		Post-test	13.12	67.4
		Follow up	8.11	12.5

As shown in Table 3, there is not much difference between the scores of the experiment and control groups in the pre-test stage. In the post-test phase, there is a difference between the average scores of the experiment and the control group. The

scores of the experimental group have increased in the post-test stage and have shown improvement in all the variables mentioned compared to the control group. The resilience

scores of the experimental group were higher than the control group in the follow-up phase.

The people in the experiment and control groups were evaluated in three stages: pre-test, post-test, and follow-up. Therefore, a univariate analysis of covariance was used to examine the difference between the two groups and investigate

the effect of mindfulness training on increasing social well-being and citizenship behavior of delinquent teenagers. Its assumptions were considered to implement this statistical test, which is presented in Table 4.

Table 4: The results of Levin's test defaults, one-dimensional variance analysis (linearity and deviation from linearity), and homogeneity of the regression slopes in the variables of social well-being and citizenship behavior

Variable		Social well-being		Citizenship behavior	
Default type	Group	F	P	F	P
Homogeneity of variance	the experiment	0.47	0.49	0.85	0.33
	The control	0.12	0.73	0.049	0.87
Linearity	the experiment	0.970	0.861	0.79	0.63
	The control	0.954	0.589	0.36	0.59
Deviation from linearity	the experiment	0.937	0.349	0.34	0.12
	The control	0.916	0.167	0.41	0.91
Homogeneity of regression slopes	the experiment	0.89	0.56	0.75	0.43
	the control	0.15	0.63	0.19	0.65
Normality	the experiment	0.13	0.2	0.19	0.13
	The control	0.15	0.2	0.11	0.23

As shown in Table 4, the results of Levin's test show that the significance level obtained is greater than 0.05. Therefore, the two experimental and control groups do not significantly differ in terms of variance, and this assumption has been followed to perform the covariance test.

It is possible to establish the assumption of linearity because the significance level of the test of deviation from linearity is higher than the error rate of 0.05. It can also be concluded that

the assumption of regressions slope homogeneity is established because the significance level of F values of the regressions slope homogeneity test is higher than the error rate of 0.05. In addition, the significance value of the Kolmogorov-Smirnov test is higher than 0.05; therefore, the assumption of normality is also established for the final analysis.

Table 5: The results of covariance analysis of mindfulness training on the increase in citizenship behavior scores

Index		Source	sum of squares	Freed om degrees	Mean square	F	significance	Eta squared
Citizenship behavior	Pre-test Post-test	pre-exam	27.2891	1	27.2891	85.116	001**0.	810.
		Interactive effect	4.1367	1	4.1367	26.55	001**0.	670.
	Post-test Follow-up	Post-test	24.2917	1	24.2917	61.581	001*0.	950.
		interactive effect	47.125	1	47.125	01.25	001*0.	480.

*p<0/001

As shown in Table 5, mindfulness training improved and increased the citizenship behavior of the experimental group

compared to the control group ($P < 0.001$, $F(1,26) = 26.55$). The squared value of eta also shows that mindfulness training explains about 67% of the variance of citizenship behavior. The citizenship behavior scores in the post-test and follow-up stages were compared. They showed that mindfulness training

in the follow-up stage increased the citizenship behavior of the experimental group compared to the control group ($P < 0.001$, $F(1,26) = 25.01$). This effectiveness remained from the post-test to the follow-up stage, and the subjects could maintain the achievements obtained during the training.

Table 6: Results of covariance analysis of mindfulness training on increasing social well-being scores

Index		Source	sum of squares	Freedom degrees	Mean square	F	significance	Eta squared
Social well-being	Pre-test	pre-exam	66.3667	1	66.3667	51.58	001*0.	680.
	Post-test	Interactive effect	29.563	1	29.563	98.8	01**0.	250.
		Post-test		03.4752	1	03.4752	07.1100	001*0.
	Post-test - follow-up	interactive effect	28.245	1	28.245	78.56	001*0.	670.

* $p < 0/001$, ** $p < 0/01$

As shown in Table 6, mindfulness training improved and increased the social well-being of the experimental group compared to the control group ($P < 0.001$, $F(1,26) = 8.98$). In addition, the squared value of eta indicates that 25% of the variance in social well-being is explained through mindfulness training. The social well-being scores in the post-test and follow-up stages were compared. They showed that mindfulness training in the follow-up stage increased the social well-being of the experimental group compared to the control group ($P < 0.001$, $F(1,26) = 56.78$).

Discussion and conclusion

The present study showed that mindfulness training improved and increased the citizenship behavior of the experimental group compared to the control group ($P < 0.001$, $F(1,26) = 26.55$). The above result is consistent with the results of Cheshure, Zeigler-Hill, and Lehtman (2020), Carmedy and Baer (2017), Carson & Langer (2016), and Chambers and Allen (2014). They found that mindfulness training improves citizenship behavior.

The research results also showed that mindfulness training improved and increased the social well-being of the experimental group compared to the control group ($P < 0.001$, $F(1,26) = 98.8$). The above result is consistent with the results of Cozolino (2018), Defrosters, Joshua & Klemanski (2016), De Vibe (2015), and Narimani, Zahid, and Golpour (2017). They indicated that mindfulness training increases social acceptance and participation and strengthens social well-being. It can also be stated that mindfulness reduces a person's exaggeration by focusing on the facts and paying attention

based on the here and now, not rejecting or denying various issues and problems in the face of their experience. Consequently, the person considers the problems as they are, not as he thinks under the influence of the different circumstances. In addition, having a correct and realistic understanding of the problems instead of ignoring the shortcomings will lead to a more positive approach and an optimistic attitude to life. In this way, the person mildly motivates himself for life changes and corrects his harmful and undesirable behavior patterns. When the person faces unfortunate situations, instead of reactions that lead to worsening the situation, he has a state of awareness and acceptance, self-confidence, the ability to face the issue consciously, accepts responsibility for difficult situations, keeps his peace, and legally finds a logical solution for it, and this process improves citizenship behavior. Mindfulness helps to understand that negative emotions happen but not as a fixed and permanent part of the personality. It allows the person to react to events with reflection instead of an instinctive response (Williams, 2016).

In this case, the ability to observe states such as anxiety increases. In addition, Instead of automatic behavior patterns, the person can manage the existing situation and experience less stress by understanding the presence in the present time with emotions and non-judgment. Focusing on the present moment empowers processing all aspects of immediate experience, including cognitive, physiological, or behavioral activities. The mindfulness-based practice and techniques help the person gain control over his daily activities, moment-to-moment awareness of his thoughts, feelings, and physical states, and frees himself from everyday and automatic thoughts focused on the past and future. (Howell & Digdon, 2010).

Mindfulness does not directly treat problems because it is not a technique for understanding the past or correcting wrong ways of thinking in the past. Mindfulness pays vigilantly to investigating the underlying stimuli of cognitions and emotions, exposes the hidden themes of life to awareness, and experiences better relationships with others by recognizing and being aware of emotions. People in this method realize that they are not only thinking but can also observe their thinking through formal meditations (such as breathing and body meditation, mindful yoga meditation, and body awareness meditation) and informal meditations (such as eating, walking, showering, etc.) and habit-breaking exercises (Ostman & Parker, 2019) which increase the social well-being.

One of the limitations of the current research is the inability to generalize the research due to the implementation of the research on delinquent teenagers (It should pay attention to generalizing the findings to other vulnerable groups). It is suggested to reduce the study's limitations by controlling the intervening factors such as age, gender, social and cultural status, etc., and provide the basis for generalizing the results as much as possible. In addition, this training is suggested to be implemented in other vulnerable groups and delinquent teenage girls. It is suggested to implement this training in the auxiliary, supportive, and empowering interventions with other psycho-social supports to increase life quality and improve coping ability and capacity due to the effectiveness of mindfulness training in increasing citizenship behavior and social well-being. In addition, training workshops were planned for these people and their families to empower them to prevent or reduce problems and consequences. Various research can improve the delinquent teenagers' situation, policy-making, and planning to improve their quality of life by investigating their citizenship behavior, social well-being, and related variables.

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Conflict of interest

None.

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Ethics Statement

All Permissions to conducting this research has been approved.

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