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The effect of psychodrama on anxiety levels and stress coping styles in academicians

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Abstract

This study aimed to investigate the effects of psychodrama on stress and coping with stress in people working as medical doctors and nurses academicians. This study confirmed whether psychodrama could be effective on stress and coping mechanisms for nurses and medical doctors academicians. Individuals were evaluated by the state and continuity anxiety scale, the stress coping style scale, the Hamilton anxiety scale, and the Hamilton depression scale. The Statistical Program for Social Sciences-SPSS for Windows, version 22.0, was used for statistical analysis (SPSS Inc., Chicago, IL, USA). Data are given as mean (standard deviation) and number (percentage). To test the normal distribution compliance of the data, the Kolmogorov Smirnov test, T test for independent groups in normally distributed data with two groups, ANOVA test for data with more than two groups with normal distribution, and Mann Whitney U test for data with normal distribution was used. A statistically significant difference was found in the pre-test and post-test average scores of the applied scales. Practice Implications It is recommended that this study be performed with a more homogeneous patient group. It was found that psychodrama significantly affected stress and stress coping styles in individuals who work as academicians. It was found that psychodrama significantly affected stress and stress-coping styles in individuals. The most important limitation of our study was that the participants were in the same academic community.

Keywords: Psychodrama, stress, coping stress, academician

Introduction

Although stress has a negative connotation, it is a human's adaptation response to their environment. People react to a threat in their environment by creating stress. People are exposed to stressful life events at home and work in daily life. People develop various strategies to cope with these stressful life events. Coping with stress is considered an ever-changing, cognitive, and behavioral effort to adapt to reduce the negative effects of stress [1]. The coping styles with stress are closely related to an individual's personality traits and capacity to use their possessions. Work-life is one of the environments where stressful

events occur frequently. Different stressful situations may arise depending on the nature of the work done.

The academic profession is among the occupational groups with a high-stress intensity. Time pressures, long working hours, unrealistic delivery dates, lack of appropriate rest breaks, constant attention to work, making high-level decisions, and complex information may cause individuals to face stress. Economic responsibilities are as important as academic responsibilities. The fact that people have to work harder to fulfil their economic responsibilities can lead to frustration and depression in employees. Irregular working hours, overtime, and

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the shift system expose employees to stress to generate more economic income [2]. All these stress sources cause the physical and mental well-being of academicians to deteriorate.

Psychotherapeutic interventions are methods known to positively affect individuals' quality of life and cope with stress [3,4]. Group therapy is also among these methods. Group psychotherapy is performed with 8-15 participants in general, where the group's principles and framework are defined and agreed upon with the participants, and the participants' consent is obtained. For healing factors to be functionally activated in group practices, an atmosphere of trust is provided by fulfilling/ensuring the fulfillment of the participants' and the manager's responsibilities, such as confidentiality, attendance, and constructive feedback, which are clarified and detailed in the agreed principles [5,6,7].

Psychodrama is an action-based group psychotherapy method that is performed by fulfilling the conditions required by the action. It is aimed to improve the role repertoire of the participants by developing the role repertoire, working on possible solutions, realizing personal and interpersonal problems, viewing themselves from the outside with the mirror technique, trying and rehearsing the new behaviors they want to implement, and gaining different and new perspectives. In-group activities allow members to see the results of different behaviors and problem-solving methods [8,9].

This study aimed to motivate the academic staff through groups to realize the negative effects of the stress they experience in their academic life on their mental health and to develop appropriate coping strategies to cope with these stressful life events.

Material and Methods

Study design and study sample

People who are working as academic staff in the field of health at a University, needing help due to problems in their field of study, not using drugs, without any psychiatric diagnosis according to DSM-5 (Structural Clinical Interview for DSM-5, SCID), who presented for psychodrama and were willing to join the group, were included in this study. The psychodrama group consisted of 12 people, four men and eight women. Participants were interviewed individually before the study, the patients were informed about the procedure (can't the participant pattern be more accurate), and their written consent was obtained. The group members who agreed to participate in the study completed the following scales before the psychotherapy process and three days after the 19 sessions.

Data collection tool

State-Trait Anxiety Scale (STAI-I and STAI-II) was developed by Spielberger et al. In 1983 [10]. Its adaptation to Turkish and its validity and reliability study were conducted by Oner and Le Compte [11]. Each of the subscales contains 20 items. Answers are scored between 1 and 4, and the total score obtained from each subscale ranges from 20 to 80. A high score indicates a high anxiety level.

The Beck Depression Scale (BDI) is a 21-item scale used by Beck and Steer to measure depressive symptoms [12]. Each item shows a depressive symptom. As a self-report tool, the BDI is a common tool used to measure depression. The total score ranges from 0 to 63, with higher scores indicating more severe depression. The internal consistency reliability coefficient in the validity and reliability study is 0.84 [13].

Beck Anxiety Scale (BAI) is a self-reporting scale that determines the frequency of anxiety symptoms experienced by individuals. It is a scale of 21 items, scored between 0 and 3. The high scores obtained from the scale indicate the severity of the anxiety experienced by the individual. Its validity and reliability study in our country was conducted in 1993 by Ulusoy et al. [14].

The Styles of Coping with Stress Scale was created by Folkman and Lazarus in 1980, based on the Ways of Coping Inventory, and is a scale used to determine the styles the individual uses to cope with stress [15]. The scale was adapted to Turkish in 1995 by Sahin and Durak [1]. The internal consistency coefficient calculated for the subscales in the reliability study of the Turkish adaptation of the SSTC is 0.80 for the self-confident approach subtest, 0.68 for the optimistic approach subtest, 0.73 for the helpless approach subtest, 0.70 for the submissive approach subtest and 0.47 for the social support subtest [1]. According to Folkman and Lazarus (1980), there are two basic styles of coping with stress: "Problem-Focused / Active Coping Style" and "Emotion-Oriented / Passive Coping Style"[15]. The Turkish adaptation of the 4-point Likert type scale consists of 30 items and 5 subscales. These subscales are the "self-confident approach" (items 8, 10, 14, 16, 20, 23 and 26), "optimistic approach" (items 2, 4, 6, 12 and 18), "desperate approach" (3, 7, 11, 19, 22, 25, 27 and 28), "submissive approach" (Articles 5, 13, 15, 17, 21 and 24) and "seeking social support" (1, 9, Articles 29 and 30) [1]. Scores for each subscale are calculated separately.

Psychodrama Group Psychotherapy Practice

Group applications were carried out in a hall suitable for psychodrama group practice at University, with a total of 19 meetings, for 4 hours a per session, twice a week. A therapist and co-therapist led each session, and each session was supervised. Although the psychodrama sessions progress spontaneously considering the existing needs of the members, the group's therapist was prepared in advance in accordance with the stages of the group. All sessions followed the warm-up, action, and sharing phases.

Sessions

The first session was aimed at determining the common goals and principles of the group. For this, the previously prepared group contract items were played with psychodramatic methods. It aimed at the group members to take responsibility for the group, adopt the principles, and create a safe environment. Some members left the group in the second session. Although the purpose and method were explained beforehand, it can be thought

that individual and group goals did not match and/or did not find the method suitable for them when they saw the application in the first session [16]. The rest of the group was asked to use play dough to express their emotions. It was thought that play dough would allow people to regress in control and make it easier to express their emotions. It was assumed that because the members worked as academicians at the same university, their relationships in the academic environment or their academic life could be reflected in their relationships in the group environment or their academic life within the group. For this reason, the game of removing hats (representing workplace relationships) was played. A meeting game was played to start a new group relationship for the group members who left their academic and social relations outside of the group and to encounter these new roles.

In the third session, the tree and wind game was played to support the trust relationship of the members of the group. It was aimed to ensure that the participants, who were in the roles of tree and wind after they became pairs, were to get to know each other with these roles and to provide trust. In the last game, the group members who went for a walk in the forest were made to express themselves and their processes by selecting living or non-living beings in the forest.

In the fourth session, the game of getting to know each other and taking off the hats was played as new members joined the group. A game was organized for the group members to choose their band names with their inner music. This game aimed to ensure that the members leave their academic and social identities outside of the group and continue with their new roles.

With the mirror game played in the fifth session, the members were asked to evaluate themselves from the eyes of others. This game also allowed them to meet again in the group. Afterward, a hello party game was played to ensure group cohesion. Members were asked to join this party as fairy-tale heroes. Thus, it was aimed to leave their academic titles and be in the group on their spontaneity.

The sixth session aimed for group members to express themselves by using body language and gain awareness about their 'self' with the group sculpture game. In addition, a group tree game was played to understand group dynamics and see their functionality.

In the seventh session, the mourning game was played with the protagonist; with this game, the members supported the protagonist with their feelings and experiences. With the chair game run first and now and then, the members could evaluate the group process and clarify their goals.

In the eighth session, the warm-up game Chinese Whispers was played. This game is a warming-up game where emotions are shared, much talking, and communication difficulties are shown, such as information, coming to us from many sources, sometimes becoming corrupted somewhere along the way. In the group in Phase 2, where conflicts were intense, they started by choosing a

game to speak loudly of unspeakable sentences and unexplained feelings. Also, this game was aimed to make the group put aside their academic identity, in other words, to provide controlled regression by reminding members of childhood periods. This continued until the Protagonist game.

The ninth session started with the protagonist's game. The protagonist brought a group play regarding the intervening time and distance negatively affecting their relationships with their social environment. The play aimed to separate the group in the second phase, which is one of the forming stages of the group, to separate their conflicts from the people with whom they were transferred and to encounter them without retransmission. Therefore, they played the children's games they played with their childhood friends, both with their old friends in the role and with their bandmates. As Moreno suggested, it was planned to develop a single relationship by correcting the transference relationship [17].

In the tenth session, a group picture was made. It was aimed at the members to grow closer to each other, to feel that they are together despite their differences, and to contribute to integration as the theme of the third phase.

In the eleventh session, the protagonist group said they were angry after the picture. A protagonist-centered game was launched, and the members in the post supported the protagonist with their feelings and experiences.

The twelfth session started with a game of form and content. The goal of this game was to reinforce group cohesion. In addition, this game aimed to increase the individual differences of the group members and support group development. The game of receiving gifts from the group was played so that the group members who saw their individual differences were a member of the group with these differences and left the group with a positive feeling. At the end of the session, each member was told to ask for something from the group that would complement them and the group. The goal here was to create functional bonds between the group members. The game, which was thought to serve this purpose, was the game of asking for gifts from the group.

The thirteenth session started with the group tree game. The goal of this game was to let each group member see where and how they were in the group. While ending session 13, the members presented gifts using psychodrama objects and shared their feelings and wishes for each other.

In the fourteenth session, the picture in the frame game was played. Each member brought to the group a picture s/he remembered from the past. Each member played his/her own picture game. This game aimed to prepare the members to make new adjustments to their own lives.

The fifteenth session aimed to go to Aslantepe Mound and connect the members to a place where so many civilizations have come and gone, to support them in establishing their connections with their roots, to recognize the strong and supportive parts

that remain there, and to help them review their priorities by reminding them of the forgotten and remaining parts of human history. In this way, it would be ensured that they form their next goals according to their inner needs. Then, the reason for the transition to the social atom was to recognize its current roots and connections and allow them to make the necessary arrangements. The social atom was made for members to see their relationship networks.

In the sixteenth session, a group game called “a village tale” was played. It aimed at group members to see their strengths and weaknesses with their roles and raise awareness about these roles and social relationships.

In the seventeenth session, a protagonist-centered game was implemented. A time-themed game was played with the protagonist. In sharing, members supported the protagonist with their feelings and experiences. Afterward, the group members were allowed to go on a group journey for the second time. Thus, the changes of the group members with the roles they took in the first journey they took together and the second journey were observed. The effects of the group process were observed.

The members were asked to stage their academic troubles towards the end of the eighteenth session. After these troubles were remembered, the magic shop game continued. This game aimed to give members insight into the function of their lives and the continuation of the things they had but wanted to change. Later, it was considered to collect luggage for the members. As the group approached the end, it was planned to realize their gains here by taking the things they would like to carry and generalizing their lives outside the group.

Participants were asked to hold a farewell ceremony for the last session in the nineteenth session. It aimed to allow the members to say goodbye to the group and feel the process was completed.

Ethical principles of study

The study was approved by the Ethics Committee of the University (Approval Number: 2013-204).

Statistical Analysis

The Statistical Program for Social Sciences-SPSS for Windows, version 22.0 was used for statistical analysis (SPSS Inc., Chicago, IL, USA). Data are given as mean (standard deviation) and number (percentage). To test the normal distribution compliance of the data, the Kolmogorov Smirnov test, T test for independent groups in normally distributed data with two groups, ANOVA test for data with more than two groups with normal distribution, and Mann Whitney U test for data with normal distribution was used. The significance level was accepted as $p < 0.05$ in the evaluations.

Results

The socio-demographic characteristics of the members of the psychodrama group are given in Table 1. The average age of the participants was $28.83 (\pm 1.74)$. 66.6% of the members were women, and 33.3% were men. The ratio of married and single

people was 50%. 58.3% worked as an academic in medicine, and 41.7% in the nursing department.

Table 1. Socio-demographic characteristics of the members

n:12		
Age (average $\pm$ SD)		28.83 $\pm$ 1.74
Gender	Female	8 (66.6%)
	Male	4 (33.3)
Marital Status	Married	6(50%)
	Single	6 (50%)
Department of work	Medicine	7 (58.3%)
	Nursing	5 (41.7%)

SD: Standard Deviation

Table 2 shows the pre-test and post-test average scores of the academicians participating in the group study for the STAI-I, STAI-II, BA, and BD scales. A statistically significant difference was found in the applied scales' pre-test and post-test average scores. Average scores in all scales were found to be higher in pre-tests but lower in post-tests.

Table 2. Comparison of the STAI-I, STAI-II, Beck Anxiety (BA) and Beck Depression Scales (BD) mean scores of participants before and after psychodrama

	Pre-test	Post-test	P
STAI-I	32.16 ($\pm$ 5.49)	29.75 ($\pm$ 4.88)	0.03
STAI-II	36.83 ($\pm$ 7.38)	34.08 ($\pm$ 6.57)	0.01
BA	6.58 ($\pm$ 6.24)	5.5 ($\pm$ 6.03)	0.018
BD	6.58 ($\pm$ 4.66)	4.75 ($\pm$ 4.3)	0.04

Bold indicated $p < 0.05$

Table 3. Comparison of the average scores of the subscales of the participants' coping styles with the stress scale before and after psychodrama

	Pre-test	Post-test	P
Self-confident	14.83 ($\pm$ 1.89)	16 ($\pm$ 2)	0.04
Optimistic	9.5 ($\pm$ 2.23)	10 ($\pm$ 1.95)	0.02
Helpless	8.25 ($\pm$ 3.69)	6.58 ($\pm$ 3.5)	0.07
Submissive	8 ($\pm$ 2.48)	6.66 ($\pm$ 3.2)	0.01
Social support	8.16 ($\pm$ 1.8)	9($\pm$ 1.04)	0.13
Active	32.58 ($\pm$ 5.07)	35 ($\pm$ 3.61)	0.06
Passive	15.83 ($\pm$ 4.91)	14.66 ($\pm$ 7.55)	<0.01

Bold indicated $p < 0.05$

Group members' coping styles and the pre-test and post-test average scores of subscales are given in Table 3. Self-confident and optimistic subscale scores increased, while post-test scores were lower in the helpless and submissive subscales. It was determined that there is a statistically significant difference in the four subtests. Although there is no statistically significant difference between the social support pre-test and post-test scores, post-test scores are higher. Also, as the scores obtained from the "self-confident approach," "optimistic approach," and

"seeking social support" subscales increase, one's "active coping styles"; as the scores obtained from the "helpless approach" and "submissive approach" subscales increase, they show that they use "passive coping styles" more. In our study, while active coping styles' post-test mean scores were higher, passive coping style post-test scores were lower. Statistically, the difference is significant.

Discussion

In this study, a psychodrama group was formed with the participation of academic staff working in the field of health. In our study, before starting the group, the therapist assessed the participants once by a pre-interview, and a contract was established with the participants.

Our working group consisted of young adults in their most productive period of life in terms of work and social productivity. These people are academicians working in the health field, which requires a high level of cognitive performance and an intense workload. Our research has also examined psychodramatic methods in the symptoms and attitudes of academicians against stress.

Stress is a situation that needs to be dealt with, but if coping strategies are maladaptive, psychological health deterioration and accompanying psychopathological symptoms are also inevitable [18]. Based on the stressful events and experiences in their work and social lives, the group members opened the situations, games, sharing, and feedback they perceived as stressful to the group. Through psychodrama sessions, they experienced their own emotions, mental designs, and realization processes within the group.

In our group study, the STAI-I, STAI-II, BA, BD scales were applied to the participants to measure their anxiety and depression levels before and after psychodrama sessions. Both anxiety and depression levels in-group members were found to be statistically significantly lower after psychodrama.

This study has shown that psychodrama contributes to both individual development and the improvement of depression. It has been reported that psychodrama has a healing effect on depressive symptoms by stimulating spontaneity and creativity, especially with an increase in the amount of speech, associations, and taking action [4].

In our study, we support that psychodrama may improve stress-related depressive symptoms. The Beck depression inventory, which measures the level of depressive symptoms in our study, focuses on mood symptoms rather than cognitive functions [19,20,21]. The change of attitudes that include the dimensions of emotional thoughts and behaviors can occur over a long period in human life. For this reason, the scale we used seems limited to evaluating cognitive change in individuals. However, we anticipate that changes in mood and behavior that improve with psychodrama can provide a cognitive change in the long term

and contribute to a decrease in people's pessimistic perspectives against stressors. In our study, the group members state that their emotions and changes have also changed during the feedback phase during the therapy process after the sessions.

Anxiety is situationally associated with acute-state-oriented episodes that fluctuate over time. It can last a lifetime as a personality trait when it becomes permanent. Consistent with the Trait Anxiety Theory, people's high anxiety levels cause them to become hypersensitive and psychologically hypersensitive to stimuli [10]. Our study found a statistically significant reduction in both situational and trait anxiety levels with psychodrama. Stress perception is related to the person's cognitive equipment and environmental factors. When anxiety, which may occur due to stress, becomes maladaptive, it negatively affects a person's life [10].

Our study shows that psychodrama is effective in reducing anxiety. Psychodrama increases awareness of oneself and others with whom they are in a relationship [15]. Increasing awareness and insight into the physical and emotional effects of stress will contribute to the protection of one's own mental health and social relationships, as well as professional development. Extensive research findings emphasize that effective coping strategies individuals use to cope with their stress experiences positively affect mental health [22,23,24].

Our study found a statistically significant increase in the mean scores of the self-confident and optimistic approach, considered active coping methods after psychodrama. When pre-test and post-test scores for seeking social support were compared, the difference was not statistically significant. However, it was found that there was an increase in the scores in the subgroup of seeking social support after psychodrama. A significant decrease was found in the mean scores of the helpless and submissive approach among the passive coping mechanisms. Animating previous experiences that people have difficulty overcoming with their coping methods in the psychodrama scene allows for testing reality and developing alternative thinking. With the occurrence of interpersonal learning and behavior changes, people's attitudes toward stressors also change.

Working with people having similar problems in group psychotherapy practices decreases the feeling of loneliness, understanding, and sharing prepares the ground for the development of empathy. The development of new solutions to challenging situations becomes easier [25,26,27]. In our study, while active coping attitudes increased, the decrease in passive coping attitudes supports the healing effect of psychodrama in coping with stress. The group work carried out contributed to the increase in the awareness of the members of the academicians about their stressors, improvement in anxiety and depression symptoms, as well as using more effective coping mechanisms against stressors.

The most important limitation of our study was that the

participants were in the same academic community. Even though the participants were in the same academic community, a problem of trust and internal competition was reflected in the group. When the game of excluding the workplace roles was played, it was not always easy for each participant to encounter new roles according to individual differences and to start new relationships. In this case, symbols were used more frequently. Another limitation is the number of participants included in the study is very small.

The group psychotherapy sessions in this study helped group members become aware of their stress factors and develop skills to deal effectively with stressful situations. The results show that psychodrama is very important in terms of both protecting participants' psychological mental health and in professional development. Working in health is extremely stressful and compelling. This study's results showed that psychodrama reduces anxiety and stress levels. According to the results of this research, we project that psychodrama can be applied to healthcare professionals working under intense stress, can reduce stress level and increase work efficiency.

Conflict of interests

The authors declare that there is no conflict of interest in the study.

Financial Disclosure

The authors declare that they have received no financial support for the study.

Ethical approval

The study was approved by the Ethics Committee of Inonu University. (Approval Number: 2013-204).

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