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The Efficacy of Emotion-Focused Psychotherapy on Perceived Stress and Psychological Well-being in Patients with Corona Anxiety during the Pandemic

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ABSTRACT

Objective: The present study aimed to investigate the efficacy of emotion-focused psychotherapy on perceived stress and psychological well-being in patients with corona anxiety during the pandemic.

Methods and Materials: This research was conducted using a quasi-experimental design with a pre-test, post-test, and a control group, along with a three-month follow-up period. The study population consisted of individuals suffering from corona anxiety who had contacted counseling centers in Isfahan for telephone counseling during the summer of 2021. Out of the study population, 33 individuals were selected through purposive sampling and randomly assigned to either the experimental or control group. Participants in the experimental group received emotion-focused psychotherapy over two months. The instruments used in this research included the Perceived Stress Scale (Cohen et al., 1983) (PSS), the Psychological Well-Being Questionnaire (Ryff, 1988) (PWBQ), and the Corona Disease Anxiety Scale (Alipour et al., 2019) (CDAS). The data were analyzed using mixed ANOVA with SPSS version 23.

Findings: The results indicated that emotion-focused psychotherapy had a significant effect on perceived stress (P<0.0001; Eta=0.59; F=44.99) and psychological well-being (P<0.0001; Eta=0.68; F=66.28) in patients with corona anxiety.

Conclusion: Based on the findings of the current study, emotion-focused psychotherapy, utilizing techniques of emotional awareness, emotional experience, regulation, transformation, and change, can be an effective method for reducing perceived stress and improving psychological well-being in patients with corona anxiety.

Keywords: Perceived stress, Corona anxiety, Psychological well-being, Emotion-focused psychotherapy



1. Introduction

OVID-19 is a rapidly spreading disease caused by a specific virus known as the coronavirus. Common symptoms include fever, cough, shortness of breath, and breathing difficulties. In severe cases, this infection can lead to pneumonia, severe respiratory problems, kidney failure, and even death (Repullo, 2021). Since the outbreak of this disease, due to its unknown nature and the lack of medical information and resources, the world has witnessed an increasing trend in the number of cases and high mortality among people (Asli Azad et al., 2021) and studies have shown that many healthcare workers, due to frequent and close contact with patients, are at risk of infection, leading to their illness and sometimes death, intensifying public panic (Law et al., 2020). This pandemic event is a significant social occurrence that not only affects a region but has implications at the national and global level, necessitating attention to its psychological effects on society. During the COVID-19 pandemic, factors have led to a range of symptoms to clinical disorders including signs of fear and worry to clinical anxiety (Ezazi Bojnourdi et al., 2020; Swami et al., 2021). Meanwhile, individuals in the community experience significant anxiety daily due to fear of contracting the disease. The widespread anxiety related to COVID-19 appears to be largely due to individuals' cognitive ambiguity about it (Asli Azad et al., 2021). Fear of the unknown reduces the sense of safety in humans as ambiguities and unknowns have always been anxietyinducing for mankind (Chen et al., 2021).

Due to the widespread impact of COVID-19 on bodily physiological functions and its rapid transmissibility, significant stress is observed among the infected, recovered individuals, and healthy people in the community ((Ezazi Bojnourdi et al., 2020; Swami et al., 2021); as reports of reinfection among the recovered, multiple virus mutations, and long-term disease complications like pulmonary and respiratory issues have caused considerable stress in the community (Swami et al., 2021). Thus, addressing the stress of various individuals during the COVID-19 pandemic is crucial as reducing stress can improve individuals' resilience and coping capacity during the pandemic (Davaie Markazi et al., 2021). Individuals with corona disease anxiety, due to their psychological makeup leading to catastrophic interpretations of events, endure more stress, weakening their immune system and with the forced lifestyle changes during the disease outbreak, such as social distancing and quarantine, they fall to the lowest level of mental health (Nie

et al., 2022). Individuals may differently perceive specific stimuli as negative or positive, and from this perspective, perceived stress, with its adverse effects, can impact their tolerance threshold (Geva & Defrin, 2018). Research results indicate that perceived stress can predict the negative consequences of health-related psychological damages (Ranjan et al., 2021; Romm et al., 2022).

The occurrence of corona anxiety and the consequent formation of stress in these individuals causes a decrease in mental health indicators such as psychological well-being (Ejiri et al., 2021). Given the conditions brought about by the COVID-19 pandemic and the problems and anxieties created, individuals' mental health is at risk, leading to reported decreases in psychological well-being indicators (Chen et al., 2021). Psychological well-being is defined as the realization of individuals' true potentials (Stevenson et al., 2019). Psychological well-being also refers to the ability to actively participate in work and leisure, create meaningful relationships with others, develop a sense of autonomy, have a purpose in life, and experience positive emotions (Akram et al., 2022). Well-being includes dimensions such as selfacceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth (Abedini & Joibari, 2023). Psychological well-being not only associates with greater psychological satisfaction but also has significant implications for physical and mental health (Silva et al., 2021).

Emotion-focused therapy has been formulated as a response to the lack of clear and credible interventions, especially those that are more humane and less behavioral. This approach is called emotion-focused therapy because it draws our attention to the significant importance of emotion and emotional connections in organizing interaction patterns and key specific experiences in close relationships. Instead of simplifying emotion, this approach emphasizes it as a powerful agent of change (Hosseini Ardakani, 2020; Karimi et al., 2019; Nameni et al., 2017; Sanagavi Moharrar et al., 2019). Practitioners of emotion-focused therapy believe that humans are deeply shaped and organized by emotional experiences, and emotion is a creative and organizing force in individuals' lives. Emotion-focused therapy values emotions for their prominent role in enhancing human growth. Recently, this therapeutic process has been referred to more simply as emotion-focused therapy (Greenberg & Goldman, 2019). Emotion-focused psychotherapy is based on two main techniques: reducing dysfunctional behavioral cycles by identifying negative cycles that shape behavior and deepening emotional experiences, especially attachment-



related fear (Khodabandehlu et al., 2021; ŞEnol et al., 2023). In emotion-focused psychotherapy, the fundamental factors of emotional schema processing, including cognitive, behavioral, and emotional factors, are targeted for therapy. This therapy encourages patients to observe and describe their emotions in a non-judgmental environment and focuses more on cognition and interpersonal experiences (Timulak & Keogh, 2020). Emotion-focused therapy is one of the methods that has shown suitable efficacy in improving psychological, emotional, and social functioning in various individuals. Its effectiveness on the health and psychological well-being of students with corona anxiety, anxiety and depression in patients with coronary artery disease, and depression in female teachers (Karimi et al., 2019).

While the results of studies on the effectiveness of this therapy on emotion regulation in adolescents (Watson & Sharbanee, 2021); and emotion-focused group therapy in psychological education of spouses in South Africa (Lesch et al., 2018); on depression and mechanisms of change (Wittenborn et al., 2019); and emotional processing and emotional regulation of spouses (McNeil & Repetti, 2018; Teymouri et al., 2020; Vahdani et al., 2020); also indicate the efficacy of emotion-focused psychotherapy. summary, the COVID-19 pandemic has caused anxiety among all sections of society (especially vulnerable individuals and those with underlying diseases). This trend has affected individuals' psychological well-being, leading to the emergence of corona anxiety, necessitating the use of appropriate therapeutic methods to reduce their anxiety and stress. Moreover, due to its high transmissibility and destructive physiological effects, COVID-19 is considered a significant and painful disaster in the lives of 21st-century humans, exposing infected individuals, those recovered, and the entire community to various psychological, emotional, affective, and cognitive damages, causing the emergence of symptoms of psychological and emotional damage such as anxiety. Therefore, the use of appropriate psychological therapy methods that lead to the improvement of their psychological strength is inevitable. For this reason, the emotion-focused study aimed to employ present psychotherapy for individuals with corona anxiety. Accordingly, the main issue of the current research was to investigate the effectiveness of emotion-focused psychotherapy on perceived stress and psychological wellbeing in patients with corona anxiety during the pandemic.

2. Methods and Materials

2.1. Study Design and Participants

The research method was a quasi-experimental design with a pre-test, post-test, and a control group, accompanied by a three-month follow-up period. The study population consisted of individuals suffering from corona anxiety who had contacted counseling centers in Isfahan for telephone counseling during the summer of 2021. Convenient sampling was used in this study. This involved visiting three counseling and psychological services centers in Isfahan. Individuals who had contacted these centers due to corona anxiety and requested online and telephone counseling were identified. Initially, 73 individuals were identified. Subsequently, these individuals were contacted to inquire about their voluntary participation in the study, and 68 agreed. They were then sent the Corona Anxiety Scale (CDAS) online. After collecting and scoring the CDAS, individuals scoring above the questionnaire average (scores higher than 27) were identified. The researcher, with knowledge of the diagnostic criteria for anxiety disorders, accurately diagnosed corona anxiety. Ultimately, 53 individuals were diagnosed with corona anxiety. Then, 40 eligible individuals were selected and randomly assigned to either the experimental or control group (20 in each group). These 40 individuals were chosen based on their higher scores on the CDAS. The experimental group received emotion-focused psychotherapy online over eight sessions across two months. After the intervention began, 3 individuals in the experimental group and 4 in the control group withdrew from the study. Entry criteria included not having contracted COVID-19 since the outbreak, scoring above 27 on the CDAS, willingness to participate in the study, having at least a middle school education level, and not receiving concurrent psychiatric and psychological treatment. Exit criteria were more than two absences, lack of cooperation or failure to complete assigned tasks, and no longer wishing to participate in the research. To adhere to research ethics, participants consented to participate in the intervention program and were informed about all intervention stages. After completing the research process, individuals in the control group were invited to receive the intervention. Eight individuals from the control group participated in the intervention, while the rest declined.

Inclusion criteria included: 1. Mothers aged 25-45 years; 2. Mothers of 7-11-year-old children with symptoms of ODD; 3. Completion of the consent form for treatment and willingness to cooperate; 4. Scoring low on questionnaires





for parenting self-efficacy, family cohesion, and distress tolerance; 5. Being under the coverage of the Imam Khomeini Relief Committee; 6. Not having acute psychological or personality disorders based on scores on the revised symptom checklist questionnaire; 7. Commitment to attending all sessions and not receiving individual counseling services outside of the treatment sessions. Exclusion criteria included: 1. Mothers who were addicts or alcoholic; 2. Those taking psychiatric and psychoactive drugs; 3. Mothers with physical disabilities or intellectual disabilities; 4. Mothers who were found during the treatment to not meet the research objectives; 5. Absence from more than two treatment sessions; 6. Having a mental disorder based on self-report; 7. Attending psychotherapy sessions at counseling centers and clinics in Sari individually or in groups.

The required information for the current research was collected through library research, including accessing reputable domestic and international databases, university libraries, scientific and research centers, and obtaining relevant articles and books. Field-level data collection, after coordination with the authorities of the Imam Khomeini Relief Committee in Sari and providing explanations to the authorities and mothers of children with symptoms of ODD in Sari during the 2022-2023 academic year, involved purposive sampling of 30 mothers of children with ODD (based on the Oppositional Defiant Disorder questionnaire scores by Hashemi and colleagues, 2008), divided into two groups of 15 each (one experimental and one control group). The experimental group received choice theory-based parenting training in 8 sessions of 90 minutes each, and the control group was placed on a waiting list. After the training sessions, questionnaires were administered again to both groups.

The necessary coordination with the counseling center authorities was made for the study. Individuals with corona anxiety who had contacted these centers were identified, selected as research samples, and randomly assigned to the experimental and control groups. The experimental group received emotion-focused psychotherapy in eight 75-minute sessions weekly online. Meanwhile, the control group did not receive any interventions.

2.2. Measures

2.2.1. Corona Disease Anxiety

Corona Disease Anxiety Scale (CDAS) was developed and validated by Alipour et al. (2020) to measure anxiety resulting from the outbreak of the coronavirus in Iran. The final version of this instrument contains 18 items and 2 factors (components), measuring psychological symptoms (items 1-9) and physical symptoms (items 10-18). It is scored on a 4-point Likert scale (Never=0, Sometimes=1, Most of the time=2, Always=3), with possible scores ranging from 0 to 54. Higher scores indicate a higher level of anxiety. The cut-off score for this questionnaire is 27. The reliability of this tool was determined using Cronbach's alpha for the first factor (0.879), the second factor (0.861), and the entire questionnaire (0.919). The Guttmann lambda-2 value for the first factor was 0.882, for the second factor 0.864, and for the entire questionnaire 0.922. Criterionrelated validity was assessed by correlating this instrument with the Mental Health Questionnaire, showing correlations with the total score of the mental health questionnaire and components of anxiety, somatic symptoms, social dysfunction, and depression, respectively, as 0.483, 0.507, 0.418, 0.330, and 0.269, all significant at the 0.01 level (Alipour et al., 2020). The reliability of this questionnaire in the current study was calculated using Cronbach's alpha as 0.83.

2.2.2. Psychological Well-Being

Developed by Ryff in 1980, the Psychological Well-Being Questionnaire (PWBQ) consists of 18 items and 6 subscales. The subscales include Self-Acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth. It is a self-report measure with a six-point scale for each question (Strongly disagree=1, Disagree=2, Slightly disagree=3, Agree=4, Slightly agree=5, Strongly agree=6), with scores ranging from 8 to 108. Higher scores indicate better psychological well-being (Bayani et al., 2008; Ryff & Keyes, 1995; Ryff & Singer, 2006). The reliability of the PWBQ in this study was calculated using Cronbach's alpha as 0.85.

2.2.3. Perceived Stress

Developed by Cohen et al. (1983), the Perceived Stress Scale (PSS) consists of 14 items rated on a five-point Likert scale (Never, Almost never, Sometimes, Fairly often, Very often: scores from 0 to 4). Thus, the score range for this scale is from 0 to 56, with higher scores indicating greater perceived stress. Internal consistency reliability coefficients obtained through Cronbach's alpha ranged from 0.84 to 0.86 in two groups of students (Saadat, Asgari, & Jazayeri, 2015). Perceived stress is significantly correlated with symptoms of





depression and physical life events, social anxiety, and lower life satisfaction, and the use of health services (Cohen et al., 1983). This scale was standardized in a cross-cultural study by Ghorbani, Bing, Watson, Davison, and Mack (2002), showing a Cronbach's alpha of 0.81 for Iranian subjects and 0.86 for American subjects. They also reported acceptable content validity for the PSS (Basharpoor et al., 2013; Chen et al., 2023; Cohen et al., 1993). The reliability of this questionnaire in the present study was calculated using Cronbach's alpha as 0.82.

2.3. Intervention

2.3.1. Emotion-Focused Therapy

The intervention program was executed on a planned weekly basis. After the online session, participants could ask questions and receive answers as if they were in a face-to-face intervention. After the intervention process began, 3 individuals in the experimental group and 4 in the control group withdrew from the study. Therefore, the final sample size was 33 individuals (17 in the experimental group and 16 in the control group).

Session 1: The first session focused on establishing relationships, acquainting, and introducing group members, along with an introduction to the practice of emotion-focused therapy for the group.

Session 2: Introduced emotions and their types: adaptive primary, maladaptive primary, secondary, and instrumental. A group exercise was conducted for participants to express their most recently experienced emotion and identify its type.

Session 3: Conceptualized emotional awareness and introduced methods to achieve it through attention to direct bodily experience and understanding the felt sense, symbolizing experience and expressing desires. Homework: Fill out an emotional awareness chart nightly and review two experienced emotions.

Session 4: Introduced anxiety and its impact on individuals' emotional experiences and awareness, including markers of anxiety (catastrophizing and fear of the imagined future). The exercise involved working with the duality of anxiety using the chair work with volunteer participants. Homework: Listen to a recording provided by the therapist and perform the requested exercises.

Session 5: Initiated emotional change part one, which included: awareness of underlying emotional pain, responding to it, and naming it. Homework: Identify an emotional pain within oneself, respond to it, and name it.

Session 6: Continued emotional transformation part two, teaching self-compassion by becoming aware of the internal worried voice and confronting it, listening to its needs through the technique of chair work. In an emotional experience, attempt to listen to the internal worried voice and converse with it.

Session 7: Transformed emotion into self-soothing coping, physiological soothing with relaxation exercises, imagining a safe place, and identifying calming experiences.

Session 8: The final session focused on summarizing and clarifying any ambiguities for the group, and completing questionnaires.

2.4. Data analysis

This research utilized both descriptive and inferential statistics for data analysis. Descriptive statistics included means and standard deviations, while inferential statistics used the Shapiro-Wilk test to assess the normality of variable distributions (acceptability level greater than 0.05), Levene's test for equality of variances (acceptability level greater than 0.05), Mauchly's test for the assumption of sphericity (acceptability level greater than 0.05), and mixed ANOVA to test the research hypothesis.

3. Findings and Results

The findings from the demographic data indicated that the participants of the study were aged between 30 to 55 years, with the experimental group having an average age of 47.55 \pm 5.33 years and the control group 49.34 \pm 4.69 years. Moreover, the participants had educational levels ranging from middle school to bachelor's degree, with the diploma level being the most common among both the experimental (52.94% or 9 individuals) and control groups (50% or 8 individuals). Of the 33 final participants in the study, 19 were women (57.58%) and 14 were men (42.42%). The mean and standard deviation of perceived stress and psychological well-being at pre-test, post-test, and follow-up phases for both experimental and control groups are presented in Table 1.





 Table 1

 Mean and Standard Deviation of Perceived Stress and Psychological Well-being in Patients with Corona Anxiety

Components	Groups	Pre-test Mean (SD)	Post-test Mean (SD)	Follow-up Mean (SD)	
Perceived Stress	Experimental Group	36.53 (6.88)	29.47 (6.87)	30.41 (6.76)	
	Control Group	34.62 (4.52)	35.37 (4.27)	35.31 (4.14)	
Psychological Well-being	Experimental Group	59.70 (9.19)	74.76 (8.32)	70.64 (8.25)	
	Control Group	60.50 (9.87)	58.87 (8.83)	59.31 (8.49)	
Dimensions of Psychological Well-being					
Environmental Mastery	Experimental Group	9.58 (3.08)	11.94 (2.60)	11.05 (2.70)	
	Control Group	11.06 (2.88)	11.18 (2.68)	10.93 (2.61)	
Self-Acceptance	Experimental Group	10.47 (3.79)	12.94 (3.32)	12.35 (3.51)	
	Control Group	9.18 (3.39)	8.87 (3.44)	9.06 (3.15)	
Positive Relations with Others	Experimental Group	10.58 (4.40)	13.29 (4.41)	12.53 (4.27)	
	Control Group	11 (4.93)	10.81 (4.51)	10.81 (4.77)	
Personal Growth	Experimental Group	11.35 (4.87)	14.05 (4.26)	13.35 (4.60)	
	Control Group	10.81 (4.77)	10.50 (4.11)	10.50 (4.09)	
Autonomy	Experimental Group	8.29 (2.73)	10.70 (2.11)	10.11 (2.17)	
	Control Group	8.93 (3.19)	8.50 (3.09)	8.81 (2.92)	
Purpose in Life	Experimental Group	9.41 (3.74)	11.82 (3.45)	11.23 (3.30)	
	Control Group	9.50 (3.38)	9 (2.96)	9.18 (2.97)	

Before presenting the results of the mixed ANOVA, assumptions of parametric tests were evaluated. Accordingly, Shapiro-Wilk test results indicated that the assumption of normal distribution for the sample data in perceived stress (P=0.20; F=0.14) and psychological well-being variables (P=0.20; F=0.12) was met. The assumption of homogeneity of variances was also assessed by Levene's test, yielding non-significant results, indicating that the assumption of homogeneity of variances for perceived stress

(P=0.71; F=0.13) and psychological well-being (P=0.39; F=0.44) was satisfied. Moreover, the t-test results showed that there was no significant difference in the pre-test scores of the experimental and control groups for the dependent variables (perceived stress and psychological well-being) (p>0.05). However, Mauchly's test results indicated that the assumption of sphericity for perceived stress (P=0.49; Mauchly's W=0.92) and psychological well-being (P=0.35; Mauchly's W=0.91) was met.

 Table 2

 Results of Mixed ANOVA for the Intra-group and Inter-group Effects of Emotion-focused Psychotherapy on Perceived Stress in Patients with

 Corona Anxiety during the Pandemic

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Value	p Value	Effect Size	Test Power
Time	645.60	2	322.80	98.23	< 0.0001	0.68	1
Group Membership	168.74	2	84.37	19.39	< 0.0001	0.46	1
Time x Group Interaction	428.14	4	107.03	32.57	< 0.0001	0.58	1
Error	302.33	92	3.28				
Time (again)	553.89	2	276.65	62.19	< 0.0001	0.67	1
Group Membership (again)	99.53	1	99.53	20.22	< 0.001	0.40	1
Time x Group Interaction (again)	198.69	2	99.34	22.31	< 0.0001	0.42	1
Error (again)	267.16	60	4.45				

According to Table 2 the group membership factor (emotion-focused psychotherapy) significantly affected the scores of perceived stress and psychological well-being in patients with corona anxiety (p<0.001). The effect size indicates that group membership (emotion-focused psychotherapy) accounted for 46% and 40% of the variance in scores of perceived stress and psychological well-being,

respectively. Additionally, the results indicate that the interaction effect of treatment type and time factor also significantly affected the scores of perceived stress and psychological well-being in patients with corona anxiety (p<0.001). Thus, it is concluded that the type of treatment received at different evaluation stages significantly impacted perceived stress and psychological well-being in patients



with corona anxiety, accounting for 58% and 42% of the variance, respectively. The statistical power indicates high statistical accuracy and sufficient sample size.

Table 3

Mixed ANOVA Results for Examining the Intra-group and Inter-group Effects of Emotion-focused Psychotherapy on Psychological Wellbeing Dimensions in Patients with Corona Anxiety During the Pandemic

Dimension	Source	Sum of Squares	Degrees of Freedom	Mean Square	F Value	p Value	Effect Size	Test Power
Environmental Mastery	Time	20.70	2	10.35	19.56	< 0.0001	0.39	1
	Group Membership	0.65	1	0.65	10.43	< 0.001	0.26	0.97
	Time x Group Interaction	11.99	2	5.99	11.33	< 0.0001	0.27	1
	Error	31.73	60	-	-	-	-	-
Self-Acceptance	Time	15.49	2	7.74	13.34	< 0.0001	0.30	1
	Group Membership	9.64	1	9.64	9.88	< 0.001	0.25	0.96
	Time x Group Interaction	5.74	2	2.87	4.94	< 0.01	0.14	0.79
	Error	34.83	60	-	-	-	-	-
Positive Relations	Time	24.69	2	12.34	37.12	< 0.0001	0.55	1
	Group Membership	6.21	1	6.21	17.77	< 0.0001	0.48	1
	Time x Group Interaction	10.19	2	5.09	15.32	< 0.0001	0.33	1
	Error	19.95	60	-	-	-	-	-
Purpose in Life	Time	18.84	2	9.42	23.92	< 0.0001	0.44	1
	Group Membership	5.83	1	5.83	12.10	< 0.0001	0.28	0.98
	Time x Group Interaction	6.22	2	3.11	7.90	< 0.001	0.20	1
	Error	23.63	60	-	-	-	-	-
Personal Growth	Time	13.14	2	6.57	13.78	< 0.0001	0.31	1
	Group Membership	12.22	1	12.22	9.13	< 0.0001	0.25	0.96
	Time x Group Interaction	6.39	2	3.19	6.70	< 0.002	0.18	0.90
	Error	28.60	60	-	-	-	-	-
Autonomy	Time	6.65	2	3.32	2.06	0.13	0.06	0.40
	Group Membership	5.50	1	5.50	0.59	0.69	0.01	0.66
	Time x Group Interaction	0.99	2	0.49	0.30	0.73	0.01	0.09
	Error	96.67	60	-	_	_	-	-

Furthermore, Table 3 examines the effectiveness of emotion-focused psychotherapy on the dimensions of psychological well-being in patients with corona anxiety. Mixed ANOVA results, based on calculated F coefficients, show that the time factor or evaluation phase had a significant impact on the scores of environmental mastery, self-acceptance, positive relationships, purpose in life, and personal growth in patients with corona anxiety during the pandemic (p<0.001). The effect size indicates that the time factor accounted for 39%, 30%, 55%, 44%, and 31% of the variance in scores of environmental mastery, self-acceptance, positive relationships, purpose in life, and personal growth, respectively. The statistical power also

indicates high statistical accuracy and sufficient sample size for evaluating this research hypothesis.

4. Discussion and Conclusion

The present study aimed to investigate the efficacy of emotion-focused psychotherapy on perceived stress and psychological well-being in individuals with corona anxiety during the pandemic. The results indicated that emotion-focused psychotherapy had an effect on both perceived stress and psychological well-being in individuals with corona anxiety. The first finding showed that emotion-focused psychotherapy led to a reduction in perceived stress among individuals with corona anxiety, consistent with the findings



of Imani Rad et al. (2021), who demonstrated that emotion-focused couple therapy is effective in enhancing forgiveness and communicative beliefs among couples dealing with marital infidelity (Iamni Rad et al., 2021). Similarly, Davaei Markazi, Karimi, and Goodarzi (2021) reported that emotion-focused interventions are effective in increasing happiness and resilience among couples (Davaie Markazi et al., 2021). Furthermore, Watson and Greenberg (2021) found that emotion-focused psychotherapy improves cognitive and psychological functioning (Watson & Sharbanee, 2021).

In explaining the current findings, it should be mentioned that emotion-focused therapy is an experiential approach that considers emotion as the foundation and basis of experience in relation to adaptive and maladaptive functions (Watson & Sharbanee, 2021). According to this therapy, change occurs through helping the client by means of emotional representation (expression, regulation, feedback, and transformation of emotional experience) and is facilitated within the therapeutic relationship context. Additionally, the primary issue in emotion-focused therapy is that emotion is a fundamental part of an individual's structure and a key agent for self-organization. The most basic function of emotion acts as an adaptive and harmonious form of information processing and readiness that directs an individual's behavior, leading to a reduction in perceived stress among individuals with corona anxiety. This approach also strives to identify emotions and transform them into comprehensible messages and constructive behaviors. The lack of ability to interpret emotional situations may create cognitive, psychological, and emotional processing issues. Emotional competencies, defined as the ability to recognize and express emotions and adapt to challenging conditions, enhance the psychological strength of individuals with corona anxiety, thereby reducing their perceived stress. In another explanation, emotion-focused therapy aims to induce therapeutic changes by expanding individuals' emotional processing. This therapy, based on four fundamental principles contained within the therapeutic content and relying on emotional and environmental support (Iamni Rad et al., 2021), includes increasing emotional awareness, expanding emotional regulation, deepening emotional experience, transforming emotion. Thus, this therapy can be effective in creating positive self-talk and new experiences, facilitating cognitive and psychological processing, and reducing emotional problems, allowing individuals with corona anxiety to be aware of their emotions rather than suppressing or being overwhelmed by them and to deepen their emotional experience. Individuals with corona anxiety realized during the sessions that emotions are neither necessarily frightening nor permanent; therefore, instead of avoiding or drowning in them, their hidden messages can be heard. Increasing awareness of emotions and expressing them; coping with the difficulties of emotional regulation and appropriately expressing them aligns with each other and leads individuals with corona anxiety to a new perception of themselves based on the perception of internal emotional and psychological capabilities, thereby experiencing less perceived stress.

The second hypothesis of the present study demonstrated the effectiveness of emotion-focused psychotherapy on psychological well-being and its subdimensions in individuals with corona anxiety during the pandemic. This is in line with the findings of Karimi, Shafiabadi, and Naeimi (2019), who showed that emotion-focused therapy is effective in reducing depression among female teachers (Karimi al., 2019). Furthermore, Namani, et Mohammadipour, and Nouri (2017) evaluated and confirmed the effectiveness of group emotion-focused therapy on interpersonal forgiveness and hope in divorced women. Welch et al. (2019) also confirmed the efficacy of emotion-focused psychotherapy on psychological flexibility and communicative quality among couples (Welch et al., 2019). Finally, Whittenborn et al. (2019) reported that emotion-focused psychotherapy, by increasing psychological tolerance and resilience among couples, led to a reduction in their depression symptoms (Wittenborn et al., 2019).

In explaining the current findings on the effectiveness of emotion-focused psychotherapy on the psychological wellbeing of individuals with corona anxiety during the pandemic, it should be noted that emotion-focused psychotherapy helps individuals not to seek immediate relief from negative emotions or avoid them (Wittenborn et al., 2019). In other words, although an individual cannot change the perceptions arising from problems and challenges associated with the coronavirus, they can alter the intensity of their emotional reactions to stressful situations and environmental events. One of the negative emotions in individuals with corona anxiety is their negative attitude towards COVID-19, its symptoms, and complications. Therefore, emotion-focused psychotherapy individuals with corona anxiety to accept rather than avoid or suppress this negative emotion and worry, freeing them from cognitive and psychological engagement with



themselves, causing them to experience less worry about themselves, which improves their psychological well-being. emotion-focused psychotherapy individuals with corona anxiety that emotions are bearable and that they have the ability to cope with emotions and manage negative and inefficient cognitive processes. This process enables individuals with corona anxiety to manage their negative cognitive processes and emotional reactions when facing problems and cognitive and psychological incompatibilities, such as excessive mental engagement and worry about the coronavirus, without showing unstructured emotional reactions, typically associated with improved psychological peace and psychological well-being. Another explanation suggests that emotion-focused psychotherapy helps individuals regulate emotional arousal and negative emotions, understand their own and others' feelings, and effectively deal with them (Karimi et al., 2019; Nameni et al., 2017), leading them to make beneficial changes in their cognitive processes, inhibit emotional arousal, and resist negative thoughts and emotions such as anxiety and stress. Furthermore, emotion-focused psychotherapy emphasizes exercises and skills that lead to the acceptance of emotional and physiological problems, the cultivation of a healthy lifestyle, the performance of opposite actions against negative emotions, and the reduction of cognitive and emotional damages. Consequently, it can be stated that the use of emotion-focused psychotherapy strategies enables individuals with corona anxiety to view negative events and situations from a different perspective, experience negative emotions with less intensity, change the intensity of their emotional reactions to them, and feel competent in controlling their emotions, thereby experiencing less discomfort, tension, and stress. This process prevents them from exaggerating the side effects and future problems related to the coronavirus disease, thereby improving their psychological well-being. Moreover, it can be stated that emotion-focused psychotherapy has managed to increase the psychological adaptability of individuals with corona anxiety by inhibiting negative emotions and also enhancing the level of positive emotions. Achieving psychological adaptability also creates the conditions for accepting the current psychological and physical states; therefore, it can be expected that the psychological well-being of these individuals will improve.

5. Limitations & Suggestions

The limitations of the present study included its focus on individuals with corona anxiety who contacted (via telephone) counseling centers in Isfahan; the lack of control over social, promotional, and personality variables affecting the anxiety of individuals with corona anxiety; the absence of random sampling; and the lack of face-to-face intervention implementation. Therefore, to increase the generalizability of the results, it is suggested that future research be conducted in other provinces and regions, other groups related to corona (such as corona patients with a history of hospitalization, corona patients with acute lung damage, etc.), controlling the mentioned factors, using random sampling, and implementing the intervention faceto-face. Furthermore, on a practical level, it is recommended that, in addition to physiological and medical treatments for individuals with corona, sufficient attention be paid to the psychological and emotional processes of individuals with corona anxiety so that therapists can use mindfulness-based psychotherapy for this group of individuals to reduce their anxiety and stress and increase their psychological wellbeing, allowing them to better follow their normal life processes. Additionally, it is suggested that exercises related to mindfulness-based psychotherapy be provided to individuals with corona anxiety through online courses and workshops to attempt to reduce their anxiety and stress while adhering to the social rules related to the COVID-19 pandemic.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics Considerations

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

Transparency of Data

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





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Authors' Contributions

All authors contributed equally.

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