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Development and Efficacy of a Psycho-educational Empowerment Package Based on the Lived Experiences of Suicide Attempters on Suicidality and Suicidal Behavior

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Abstract

Aim: This study aimed to develop and validate a psychoeducational empowerment package based on the lived experiences of individuals with a history of suicide attempts and examine its efficacy in reducing the severity of suicidal ideation and suicidal behavior.

Method: This study employed a sequential exploratory mixed-methods design consisting of qualitative and quantitative phases. During the qualitative phase, themes pertaining to the needs and experiences of individuals with a history of suicide attempts were identified through semi-structured interviews and thematic analysis. These themes informed the development of the psychoeducational empowerment package, whose content validity was assessed through expert panel review and content validity indices. In the quantitative phase, 36 eligible participants were randomly assigned to an experimental group (n = 18) and a waiting-list control group (n = 18). The efficacy of the package was assessed using a quasi-experimental pretest-posttest control group design with a one-month follow-up. Ultimately, 26 participants (12 in the experimental group and 14 in the control group) completed the study and were included in the final analyses. Data were collected using the Suicide Behaviors Questionnaire-Revised (SBQ-R; Osman et al., 2001) and the Depressive Symptom Index-Suicidality Subscale (DSI-SS; Metalsky & Joiner, 1997), and were analyzed using repeated-measures analysis of variance (ANOVA). Data analysis was conducted using SPSS-25.

Findings: The developed package demonstrated acceptable content validity. Moreover, the intervention significantly reduced the severity of suicidal ideation, as measured by the DSI-SS, and suicidal behavior, as measured by the SBQ-R, in the experimental group relative to the control group. These effects remained significant at the one-month follow-up ($p < 0.01$).

Conclusion: Incorporating lived experiences into intervention development may provide a useful basis for designing psychoeducational programs and informing mental health services for individuals with a history of suicide attempts.

Keywords: Suicide Attempted, Suicidal Behavior, Suicidal Ideation, Psychoeducation, Empowerment, Lived Experience

Introduction

Suicide remains a major public health concern worldwide and is influenced by a complex interplay of psychological, interpersonal, and social factors. Although suicidal behavior can occur across different stages of life, its consequences extend beyond the immediate crisis and may affect psychological functioning, interpersonal relationships, and adaptation following a suicide attempt (Bryan et al., 2019; Wang et al., 2025). For individuals who survive a suicide attempt, the post-attempt period therefore represents an important opportunity for interventions aimed not only at reducing suicidal risk but also at strengthening psychological resources and supporting recovery. Following a suicide attempt, individuals may continue to experience emotional distress, reduced self-confidence, difficulties in interpersonal relationships, and challenges in accessing or benefiting from available sources of support (Bagian Kulehmarzi et al., 2018; Pan et al., 2026). These difficulties highlight the importance of interventions that address both suicidal symptoms and the broader psychological processes associated with recovery. In particular, depressive symptoms are clinically important because they may interfere with motivation, psychological adjustment, and engagement with recovery-oriented activities (Pan et al., 2026). At the same time, suicidal behavior cannot be understood solely as a consequence of depression, as suicidal outcomes are associated with multiple interacting psychological and contextual factors. Consequently, interventions that target suicidal symptoms while also strengthening coping and personal resources may provide a broader approach to post-attempt care. The assessment of suicidal symptoms and suicidal behavior is therefore central to evaluating interventions for individuals with a history of suicide attempts. The Depressive Symptom-Suicidality Subscale (DSI-SS) provides a focused assessment of depressive symptoms and suicidality, while the Suicidal Behaviors Questionnaire-Revised (SBQ-R) assesses suicidal behavior and related experiences. Examining these outcomes together can provide complementary information regarding changes in both current depressive-suicidal symptoms and suicidal behavior. Accordingly, these measures constitute important outcomes for evaluating interventions designed for suicide attempters. Although various psychological, educational, and psychosocial interventions have been developed for suicide prevention and post-attempt support, previous research has predominantly focused either on identifying risk and protective factors or on evaluating established intervention approaches (Solidum et al., 2026; Vatrál et al., 2026; Argungu et al., 2026; Walsh et al., 2022; Ahmadboukani et al., 2022). Qualitative research has also demonstrated that the experience of a suicide attempt is multidimensional and may involve difficulties related to interpersonal relationships, emotional distress, hopelessness, social disconnection, and barriers to seeking support (Heesen et al., 2024; Watling et al., 2022; Ahmadboukani et al., 2022). However, an important gap remains between identifying these lived experiences and systematically translating them into a structured psychoeducational intervention that can subsequently be evaluated using specific clinical and behavioral outcomes. This gap is particularly important because interventions developed primarily from clinical or theoretical perspectives may not fully incorporate the needs and perceived barriers reported by individuals with lived experience. Although previous qualitative studies have contributed

valuable knowledge about the experiences of suicide attempters, relatively less attention has been given to using these findings as the direct foundation for developing an empowerment-oriented psychoeducational package and then empirically evaluating its effects on both depressive-suicidal symptoms and suicidal behavior. Thus, the integration of lived experience into intervention development represents a distinct direction from studies that examine experiences descriptively or evaluate interventions without using participants' lived experiences as their primary developmental foundation. The present study addresses this gap by developing a psychoeducational empowerment package based on the lived experiences of suicide attempters and evaluating its efficacy in relation to DSI-SS and SBQ-R outcomes. The study is novel in linking a qualitative understanding of lived experience directly to the development of an intervention and subsequently testing that intervention using complementary measures of depressive symptoms and suicidality and suicidal behavior. In this way, the study seeks to move beyond describing the experiences of suicide attempters toward translating those experiences into an empirically evaluated psychoeducational intervention.

Methodology

The present study employed a sequential exploratory mixed-methods design consisting of two consecutive qualitative and quantitative phases. In the qualitative phase, semi-structured interviews were conducted with individuals with a history of at least one suicide attempt to explore their lived experiences, perceived needs, challenges, coping experiences, and factors associated with suicidality. The qualitative findings were analyzed thematically and subsequently used to identify intervention needs and inform the development of a psychoeducational empowerment package. In the quantitative phase, the efficacy of the developed package was evaluated using a quasi-experimental pretest-posttest design with a waiting-list control group and a one-month follow-up.The target population consisted of individuals with a history of at least one suicide attempt. In the qualitative phase, participants were selected through purposive sampling from the Welfare Organization, emergency centers, clinics, and hospitals in Tehran where individuals with a history of suicide attempts had been identified. Recruitment and interviewing continued until data saturation was achieved. Accordingly, 12 participants (7 women and 5 men) were included in the qualitative phase. In the quantitative phase, purposive sampling was initially used to recruit eligible participants. Individuals who met the inclusion criteria and obtained scores above the predetermined cutoff scores on the measures of suicidal behavior and suicidal ideation were considered eligible for participation. Initially, 50 individuals were screened, of whom 38 met the eligibility criteria and agreed to participate. Two individuals declined participation after receiving information about the study procedures and the number of intervention sessions. Consequently, 36 participants entered the quantitative phase. The inclusion criteria were: (a) a history of at least one suicide attempt; (b) willingness to participate voluntarily in the study; (c) no concurrent participation in another counseling or psychotherapy program; (d) absence of severe clinical disorders that could interfere with participation in the intervention; and (e) no use of psychiatric medication during the intervention period. The exclusion criteria were: (a) absence from more than two intervention sessions; (b)

insufficient cooperation during the sessions; and (c) disruptive behavior that interfered with participation in the group sessions. The cutoff criteria were applied separately to the relevant instruments. A score above 7 on the Suicide Behaviors Questionnaire-Revised (SBQ-R) was used as the cutoff for suicidal behavior. After eligibility screening and completion of the baseline assessment, the 36 eligible participants were randomly assigned to the experimental and waiting-list control groups using a simple lottery procedure conducted by the researcher. Eighteen participants were initially allocated to each group. The researcher prepared the allocation process and assigned participants to the two conditions through the lottery procedure. Randomization was conducted after completion of the pretest. The experimental group received the psychoeducational empowerment package, whereas the control group was placed on a waiting list and did not receive the intervention during the study period. Of the 36 participants initially randomized, 10 discontinued their participation during the study because they were unwilling to continue. Six participants from the experimental group and four participants from the control group withdrew at different stages of the study. Ultimately, 26 participants completed the study and provided the data required for the final analyses, including 12 participants in the experimental group and 14 participants in the control group. Participant attrition was recorded throughout the study, including the timing and group assignment of participants who withdrew. Because the withdrawals were due to participants' unwillingness to continue, no replacement participants were recruited after randomization. The final quantitative analyses were conducted using data from the 26 participants who completed the study and provided the required posttest and follow-up assessments. Participants who discontinued participation after randomization were not included in the final statistical analyses. Therefore, an intention-to-treat analysis was not performed, and the reported quantitative results represent a completer analysis.

Instrument

Semi-Structured Interview: A researcher-developed semi-structured interview guide was used in the qualitative phase. The interview guide included open-ended questions addressing participants' experiences of suicide attempts, the meanings they attributed to these experiences, perceived contributing factors, coping experiences, sources of support, and barriers to seeking help. Interviews initially began with broad and indirect open-ended questions and subsequently explored participants' experiences in greater depth. After explaining the purpose of the interview and confirming participants' willingness to participate, the interview proceeded with an open-ended invitation to describe their most recent experience of a suicide attempt in detail. Each interview lasted approximately 45–70 minutes. To establish the content validity of the interview guide, its initial framework was developed through consultation with supervising professors, advisors, and subject-matter experts. The guide was subsequently refined based on a pilot interview and relevant theoretical foundations and empirical literature concerning suicide attempts.

Suicide Behaviors Questionnaire-Revised (SBQ-R): This questionnaire consists of four items and was developed by Osman et al. (2001). It assesses lifetime suicidal ideation and attempts, suicidal ideation over the past year, suicide threats, and the likelihood of

future suicidal behaviors. A higher total score indicates a greater level of suicidal tendencies. The cutoff score for the non-suicidal population was 7. The original study demonstrated excellent convergent validity and sensitivity in discriminating between suicidal and non-suicidal individuals. The total score ranges from 3 to 18, with higher scores reflecting a greater inclination toward suicidal behavior. Amini et al. (2020) translated this questionnaire into Persian in Iran. Their analysis confirmed a one-dimensional factor structure in the Iranian sample, with factor loadings ranging from 0.70 to 0.83. The reliability (Cronbach's alpha) and average variance extracted (AVE) were 0.87 and 0.63, respectively, indicating good reliability. In the study by Light et al. (2016), the alpha value was 0.87. Kiani et al. (2019) reported acceptable internal consistency ($\alpha = 0.80$). In the present study, the reliability coefficient was 0.82.

Depressive Symptom Index-Suicidality Subscale (DSI-SS): This questionnaire was developed by Metalsky and Joiner (1997). This scale assesses the frequency and intensity of current suicidal ideation. It is a four-item self-report measure that evaluates the presence and severity of suicidal thoughts, plans, and motives among adolescents. Each item consists of a group of statements rated on a scale ranging from 0 to 3, with a maximum total score of 12; higher scores indicate greater problem severity. The severity of suicidal ideation is reflected by the total response score, which ranges from 0–3.Two studies have reported excellent internal consistency and convergent validity, as well as the ability to discriminate between suicide attempters and non-attempters in the general population (Joiner et al., 2002; Van Glishcinski et al., 2016). Psychometric analyses have also indicated that the DSI-SS possesses good convergent validity and composite reliability (Ahmadboukani et al., 2021). In the present study, the reliability coefficient was 0.90.

The study was conducted in two sequential phases. The first phase involved qualitative exploration of the lived experiences of individuals with a history of suicide attempts and the subsequent development of the psychoeducational empowerment package. The second phase involved quantitative evaluation of the developed package. In the qualitative phase, participants were identified through purposive sampling and invited to participate in semi-structured interviews. All interviews were transcribed verbatim following data collection. The transcripts were analyzed using thematic analysis, following the approach proposed by DePoy and Gitlin (2010). In the first stage, the transcripts were repeatedly reviewed to achieve familiarity with the data. Meaningful units were identified and coded line by line. Initial codes were compared and grouped into conceptually related categories. Related categories were then organized at higher levels of abstraction, and underlying meanings and subthemes were identified. The second stage involved organizing and preparing the findings for reporting (Tayebi Abolhasani, 2019). The analysis was iterative and involved continuous comparison across transcripts, codes, categories, and emerging themes. Predetermined categories were not imposed on the data; rather, categories and themes were allowed to emerge from participants' accounts. The research team reviewed the transcripts and discussed the coding and thematic structure to develop a shared understanding of the data.

Discrepancies in coding and interpretation were discussed and resolved through consensus. A total of 470 initial codes were identified when overlapping codes were retained. After removing overlapping codes, 110 unique codes remained. These concepts were subsequently organized into 30 categories and synthesized into 11 main themes. The themes reflected participants' childhood and current life challenges, attitudinal and emotional challenges, individual and social coping strategies, experiences of reaching an impasse, semantic challenges, ambivalence toward death, suicidal ideation, suicide attempts, and broader contextual, intrapsychic, psychological, and behavioral dimensions. Several procedures were used to enhance the trustworthiness of the qualitative findings. The research team repeatedly compared the original transcripts with the emerging codes, categories, and themes. The preliminary thematic structure was also reviewed by members of the research team and experts experienced in qualitative and phenomenological research. The analytic process was systematically documented to provide an audit trail of analytic decisions. Continuous comparison across interviews was used to identify similarities and differences among participants' experiences and strengthen the coherence of the thematic structure. These procedures were intended to enhance the credibility, consistency, and transparency of the qualitative analysis. Following thematic analysis, the identified themes were used to determine the main problems, needs, and contextual factors to be addressed by the intervention. Relevant therapeutic and psychoeducational approaches were then reviewed in relation to these identified needs. Intervention components and session objectives were developed by integrating the identified lived-experience themes with relevant therapeutic and psychoeducational approaches. Thus, the qualitative findings served as the basis for determining the content and focus of the intervention rather than being reported separately from the intervention-development process. The final psychoeducational empowerment package consisted of ten 90-minute sessions. To assess the content validity of the package, eight experts in psychology and counseling, each with at least five years of clinical experience, reviewed the intervention content. The Content Validity Index (CVI) was calculated according to the procedure proposed by Waltz and Bausell (1981). The experts evaluated the package using a four-point Likert scale and provided corrective feedback concerning the comprehensiveness, presentation, usefulness, clarity, and appropriateness of the package in relation to the identified experiences and needs. The experts' feedback was incorporated into the final version of the package. The reported CVI values were 1.00 for teachability of the concepts, positive outcome balance, understandability of the concepts, and appropriateness with the combined research findings, while the criterion concerning maintenance of the theoretical framework received a CVI of 0.87. Following completion of the qualitative phase and development of the psychoeducational empowerment package, the quantitative phase was conducted using a quasi-experimental pretest-posttest design with a waiting-list control group. The 36 eligible participants were randomly assigned to the experimental and control groups using the lottery procedure described above. Before the intervention, both groups completed the baseline assessments, including the DSI-SS and SBQ-R. The experimental group subsequently participated in ten weekly 90-minute sessions of the psychoeducational empowerment package. The control group was placed on a waiting

list and did not receive the package during the intervention period. Immediately after completion of the ten intervention sessions, the posttest was administered to both groups. A follow-up assessment was conducted one month later to examine the persistence of changes in the outcome measures.

Ethical approval for the study was obtained from the National Ethics Committee under the code IR.ARUMS.REC.1399.425. Participants were informed about the study procedures and their voluntary participation, and informed consent was obtained before data collection. Confidentiality of participants' information was maintained throughout the research process. Because the study involved individuals with a history of suicide attempts, the procedures used to assess immediate suicide risk and manage participants who demonstrated elevated or acute risk should also be explicitly reported. Specifically, the manuscript should state the actual risk-assessment procedure, the professional responsible for clinical assessment or supervision, and the referral or intervention procedure followed when elevated risk was identified. To facilitate methodological transparency and replication, the intervention was described according to the 12-item Template for Intervention Description and Replication (TIDieR) checklist (Hoffmann et al., 2014).

Table 1. Summary of the Psycho-Educational Empowerment Package Sessions Based on the Lived Experiences of Suicide Attempters

Session	Activity
1	Familiarization, suicide risk assessment, review of the participant's narrative (including thoughts, feelings, and behaviors before, during, and after the crisis), explanation of treatment stages and session numbers, preparation and use of the therapy workbook, commitment to treatment, and teaching the theoretical model of suicide were conducted.
2	Review of homework assignments, safety planning, identification of warning signs, identification of friends and supportive individuals, identification of professional services, safety counseling, means restriction, and identification of self-management strategies and training in those strategies.
3	Review of homework assignments, stimulus control, sleep hygiene, and training in relaxation and self-expression skills.
4	Review of homework assignments, training in mindfulness skills, provision of mindfulness exercises, and behavioral activation (including validity testing of patients' cognitive distortions in real-life situations).
5	Review of homework assignments, introduction to the concept of reasons for living and fostering emotional engagement, training in the use of the "survival box" (including reducing distress, enhancing cognitive flexibility, inducing positive emotional states, maintaining attention and focus on positive emotional experiences, and sharing experiences with another person), and development of a reasons-for-living list (aimed at increasing cognitive flexibility and weakening the participant's tendency to over-attend

	to death- and suicide-related information).
6	Review of homework assignments, instruction on negative automatic thoughts using worksheets, teaching the downward arrow technique, role-playing and challenging negative automatic thoughts, identifying cognitive distortions through Socratic questioning (i.e., posing questions to stimulate critical thinking and guide patients in evaluating the evidence that confirms or refutes their automatic thoughts), and identifying core beliefs were conducted.
7	Review of homework assignments, training on how to critically evaluate core beliefs using a challenging questions worksheet specifically focused on suicide-related beliefs, and examination of supporting and contradictory evidence.
8	Review of homework assignments; training on how to identify and label various types of cognitive distortions; using the problem-solving thinking worksheet template as a written activity; training and conceptualization of activity scheduling (to enhance the sense of mastery and accomplishment, improve social networks, and maintain treatment adherence); timing and review of activities; challenging the concept of losing meaning in life; facilitating effective meaning-making; and coping cards (which may include the safety plan, listing reasons for living, or listing coping strategies).
9	Review of homework assignments, review of strategies learned during treatment, retraining/rehearsal, and mental imagery to consolidate learning.
10	Examining the importance of supportive resources (social support), including friends, family, and other sources of support, such as professionals and other groups.

Data were analyzed using SPSS‑25. Descriptive statistics and measures of dispersion were used to summarize the data. The normality of the data was assessed using the Shapiro–Wilk test. To evaluate the effectiveness of the developed package on suicidal ideation and behavior, a mixed‑design MANOVA with repeated measures was conducted, including one between‑subjects factor (group membership) at 2 levels (experimental vs. control) and one within‑subjects factor (time) at 3 levels (pretest, posttest, and follow‑up).

Results

Based on the findings of the present study, the participants were aged range of 20 to 30 years. Of these, 65.3% held a bachelor's degree or higher, while 34.7% had an associate degree. The participants had a mean age of 23.96 years (SD = 3.27). Regarding economic status, 8 participants (30.8%) reported poor economic status, 13 (50.0%) reported moderate economic status, and 5 (19.2%) reported good economic status. Table 2 presents the means and standard deviations of the research variables for the control and experimental groups.

Table 2. Descriptive Statistics and Normality Test Results for the Experimental and Control Groups

Variable		DSI-SS				SBQ-R			
Source	Group	Mean	SD	s-w	p	Mean	SD	s-w	p
Pretest	Experimental	4.92	0.90	0.31	0.06	9.33	1.43	0.18	0.20
	Control	4.71	0.99	0.25	0.49	9.14	1.35	0.28	0.08
Post test	Experimental	2.50	0.52	0.29	0.76	6.33	0.78	0.81	0.38
	Control	4.79	0.80	0.28	0.52	9.29	1.38	0.71	0.20
Fallow up	Experimental	2.67	0.65	0.18	0.19	6.42	0.99	0.92	0.18
	Control	5.07	0.99	0.26	0.07	9.43	1.45	0.82	0.06

As shown in Table 2, the pretest scores of the experimental and control groups were comparable for both the severity of suicidal ideation (DSI-SS) and suicidal behavior (SBQ-R). Following the intervention, a decrease in the mean DSI-SS and SBQ-R scores was observed in the experimental group at both the posttest and follow-up assessments, whereas the corresponding means in the control group remained relatively stable. Furthermore, the results of Table 2 indicate that the Shapiro–Wilk (S–W) test statistics for the study variables were not significant ($p > .05$), suggesting that the normality assumption was met. To examine between-group differences at pretest, a univariate analysis of variance (ANOVA) was conducted. The results revealed no significant difference between the groups regarding DSI-SS scores [$F(1, 24) = 0.292$, $p = 0.594$] and suicidal behavior scores [$F(1, 24) = 0.121$, $p = 0.731$] at baseline ($p > .05$).

To analyze the data and examine the research assumptions, a repeated-measures analysis of variance (ANOVA) was employed. Prior to conducting the main analysis, the two prerequisite assumptions—Mauchly's test of sphericity and the homogeneity of covariance matrices—were examined and confirmed. Homogeneity of variance–covariance matrices is one of the fundamental assumptions underlying the use of ANOVA. The standard method for evaluating the equality of covariance matrices is Box's M test, in which statistical significance indicates heterogeneity or inequality of the matrices. The results of Box's M test for the homogeneity of covariance matrices of the severity of suicidal ideation and suicidal behavior scores indicated a significance level greater than .05, thus confirming that the assumption was met [Box's $M = 22.970$, $F = 0.790$, $p = .735$]. Furthermore, prior to examining the within-group variances, the sphericity of the scores across the measurement phases was assessed using Mauchly's test.

Table 3. Mauchly's Test of Sphericity and Homogeneity of Covariances for the DSI-SS and SBQ-R

Variable	Mauchly's W	Chi-Square	df	Sig
SBQ-R	0.394	21.40	2	0.001
DSI-SS	0.950	1.18	2	0.555

As shown in Table 3, Mauchly's test of sphericity for the DSI-SS was not significant, indicating that the sphericity assumption was met. Therefore, the sphericity-assumed results were used for the within-subjects analysis of the DSI-SS. In contrast, Mauchly's

test of sphericity for the SBQ-R was significant, indicating that the sphericity assumption was violated. Therefore, the Greenhouse–Geisser correction was applied to the within-subjects analysis of the SBQ-R. To examine the repeated-measures multivariate effects for the study outcomes, Pillai's trace was used. The corresponding results are presented in Table 4.

Table 4. Multivariate analysis of variance (MANOVA) for the DSI-SS and SBQ-R variables."

Variable	Effect	Value	F	DF	Error Df	Sig	Effect size
Groups	Pillai's Trace	0.752	34.83	2	23	0.001	0.75
Time	Pillai's Trace	0.819	23.69	4	21	0.001	0.82
Groups* Time	Pillai's Trace	0.857	31.77	4	21	0.001	0.86

As shown in Table 4, the repeated-measures MANOVA revealed significant multivariate effects for group (Pillai's trace = 0.752, F (2, 23) = 34.83, $p < .001$), time (Pillai's trace = 0.819, F(4, 21) = 23.69, $p < .001$), and the group × time interaction (Pillai's trace = 0.858, F(4, 21) = 31.77, $p < .001$). The significance of the multivariate test indicates that at least one of the between-subjects or within-subjects effects is statistically significant. Subsequently, the results of the between-subjects and within-subjects univariate ANOVAs are presented in Table 5.

Table 5. The results of the repeated-measures analysis of variance (ANOVA)

Variable	Source	MS	df	MS Error	Error df	F	p	Effect size
DSI-SS	group	43.38	1	32.48	24	31.76	0.001	0.57
	time	20.00	2	17.94	48	26.75	0.001	0.53
	Groups* Time	28.00	2			37.45	0.001	0.61
SBQ-R	group	71.80	1	95.54	24	18.04	0.001	0.43
	time	32.60	1.25	20.71	48	37.79	0.001	0.61
	Groups* Time	43.37	2			50.27	0.001	0.68

The results of Table 5 indicate that the F-values for the Group × Time interaction effect were 37.45 for the DSI-SS and 50.27 for the SBQ-R, which were significant at the $p < .001$ level. These findings indicate that the experimental and control groups differed significantly on the study variables at both the posttest and follow-up phases. Furthermore, the eta-squared (η^2) values for both variables exceeded .10, indicating large and substantial differences between the groups. Given the above results indicating a significant effect of time on the DSI-SS and SBQ-R, pairwise comparisons of the three

assessment phases were conducted for both the experimental and control groups to determine the precise location and magnitude of the differences; the results are presented in Table 6.

Table 6. Pairwise Comparisons of Assessment Phases for the Experimental and Control Groups

Variable	Group	Stages	Stages	Mean differences	Standard error	Sig
SBQ-R	Experimental	Pretest	Posttest	3.00	0.32	0.001
			Follow up	2.92	0.31	0.001
		Posttest	Follow up	-0.08	0.13	1.00
	Control	Pretest	Posttest	0.14	0.30	1.00
			Follow up	0.29	0.29	0.991
		Posttest	Follow up	0.14	0.12	0.706
DSI-SS	Experimental	Pretest	Posttest	2.42	0.25	0.001
			Follow up	2.25	0.27	0.001
		Posttest	Follow up	-0.17	0.22	0.858
	Control	Pretest	Posttest	-0.07	0.23	1.00
			Follow up	-0.36	0.25	0.511
		Posttest	Follow up	-0.29	0.21	0.546

According to the results presented in Table 6, for the experimental group, there were significant differences in the scores of the study variables between the pretest and posttest, as well as between the pretest and follow-up assessments ($p < .01$). However, no significant differences were observed between the posttest and follow-up mean scores ($p > .01$). In the control group, none of the three pairwise comparisons yielded significant differences ($p > .01$). Additionally, to further explore the group differences across the assessment phases, the Bonferroni post-hoc test was used; the results are presented in Table 7.

Table 7. Pairwise Comparisons between the Experimental and Control Groups at Each Assessment Phase

Variable	Stages	Group I	Group J	Mean differences	Standard error	Sig
SBQ-R	Pretest	Experimental	Control	0.19	0.55	0.731

	Posttest			-2.95	0.455	0.001
	Follow up			-3.01	0.50	0.001
	Pretest			0.20	0.37	0.594
DSI-SS	Posttest	Experimental	Control	-2.29	0.27	0.001
	Follow up			-2.40	0.34	0.001

As shown in Table 7, no significant differences were observed between the experimental and control groups in the pretest scores for the severity of suicidal ideation and suicidal behavior ($p > .01$). However, significant between-group differences were found at both posttest and follow-up ($p < .01$). These findings indicate that the experimental group showed greater reductions in the severity of suicidal ideation and suicidal behavior than the control group**,** with these between-group differences persisting at the follow-up assessment.

Discussion

The present study aimed to develop a psychoeducational empowerment package based on the lived experiences of individuals with a history of suicide attempts and to examine its efficacy in relation to the severity of suicidal ideation and suicidal behavior, as measured by the Depressive Symptom Index-Suicidality Subscale (DSI-SS) and the Suicidal Behaviors Questionnaire-Revised (SBQ-R), respectively. The findings indicated that the developed package demonstrated acceptable content validity and was associated with significant reductions in DSI-SS and SBQ-R scores. These findings provide preliminary support for the potential value of incorporating lived experiences into the development of psychoeducational interventions addressing suicidality and suicidal behavior. The findings are broadly consistent with previous research on empowerment-based interventions. For example, Kouzani et al. (2024) reported that an empowerment package based on the lived experiences of adolescent girls from divorced families improved subjective well-being and emotion regulation. Although the population and outcomes examined in that study differed from those of the present research, the findings provide support for the potential usefulness of incorporating lived experiences into psychological intervention development. The present findings are also broadly in line with research on cognitive-behavioral and other evidence-based interventions that emphasize addressing psychological processes associated with suicidal behavior (Argungu et al., 2026; Walsh et al., 2022). At the same time, the findings should be interpreted alongside studies reporting inconsistent or variable effects of psychological interventions on suicidal outcomes. Differences in intervention approaches, participant characteristics, outcome measures, treatment intensity, and follow-up periods may contribute to variation across studies. Therefore, the significant reductions observed in the present study should not be interpreted as evidence that lived-experience-based interventions are consistently effective across populations or settings. Rather, the findings provide preliminary support for the potential usefulness of this particular approach and highlight the need for replication under different methodological conditions. One possible explanation for the observed findings may be the multidimensional nature of the psychological processes associated with suicidality. Suicidal ideation and suicidal

behavior may involve interactions among cognitive, emotional, behavioral, and contextual processes rather than a single psychological factor. From a cognitive-behavioral perspective, stressful events may activate maladaptive beliefs and dysfunctional patterns of information processing, which can subsequently influence emotional and behavioral responses (Bryan et al., 2018). Accordingly, an intervention addressing interconnected psychological domains may potentially influence more than one aspect of suicidality. However, the present study did not directly examine these processes as mediating variables; therefore, this interpretation should be regarded as a possible explanatory hypothesis rather than an established mechanism. The findings may also be considered in relation to cognitive vulnerabilities identified among individuals with a history of suicide attempts. Beliefs and perceptions involving perceived burdensomeness, thwarted belongingness, shame, defectiveness, and hopelessness may contribute to psychological vulnerability and become particularly salient during stressful situations (Pan et al., 2026). Similarly, previous research has emphasized the role of negative cognitive patterns, information-processing biases, and maladaptive core beliefs in psychological vulnerability associated with suicidal behavior (Daliri et al., 2018). From this perspective, the observed reductions in DSI-SS and SBQ-R scores could plausibly reflect changes in how participants interpreted stressful experiences and responded to maladaptive cognitive patterns. Nevertheless, because cognitive distortions and maladaptive beliefs were not directly measured as mediating variables, their contribution cannot be established from the present findings. Emotion regulation and coping represent another possible explanatory pathway. Individuals with a history of suicide attempts may experience difficulties in managing distress and responding adaptively to stressful circumstances, which may increase vulnerability during periods of psychological strain (Albaum et al., 2025). Previous intervention research has likewise emphasized the relevance of coping and behavioral processes in reducing suicidal outcomes (Walsh et al., 2022). Thus, strengthening adaptive coping and emotional self-management may have contributed to the observed reductions in suicidality and suicidal behavior. However, because these processes were not examined as independent mediating variables, this interpretation remains tentative. The findings can further be understood within broader cognitive-behavioral conceptualizations of suicidal behavior, which emphasize reciprocal interactions among cognitive, emotional, behavioral, and physiological responses to stressful circumstances (Bryan et al., 2018). The observation of changes in both DSI-SS and SBQ-R is compatible with the possibility that the intervention influenced more than one dimension of suicidality. Nevertheless, the study design does not permit determination of the relative contribution of individual intervention components or psychological mechanisms. The present findings are also consistent with research suggesting that psychological interventions may influence suicidal outcomes through cognitive and behavioral processes (Argungu et al., 2026; Walsh et al., 2022). An important distinction is that the current intervention was developed specifically from the lived experiences of individuals with a history of suicide attempts, whereas previous interventions have often been derived primarily from established therapeutic models. This suggests that integrating lived-experience information with established psychological principles may represent a potentially useful direction for intervention development,

although this possibility requires further empirical examination. Overall, the findings provide preliminary support for the potential efficacy of the developed psychoeducational empowerment package in reducing the severity of suicidal ideation and suicidal behavior. The convergence of findings across the DSI-SS and SBQ-R suggests that the observed changes were not restricted to a single dimension of suicidality. However, the proposed explanations involving cognitive restructuring, emotion regulation, coping, and maladaptive beliefs should be considered hypotheses generated from the theoretical framework rather than mechanisms demonstrated by the present data. Further research directly examining these processes would be necessary to determine whether and how they mediate the effects of lived-experience-based psychoeducational interventions.

Conclusion

The present study demonstrated that the psychoeducational empowerment package developed from the lived experiences of individuals with a history of suicide attempts had acceptable content validity and was associated with significant reductions in the severity of suicidal ideation and suicidal behavior, as measured by the DSI-SS and SBQ-R, respectively. These findings provide preliminary support for the potential utility of a lived-experience-based approach in developing psychoeducational interventions for individuals with a history of suicide attempts. Further research is needed to replicate these findings and determine the durability of the observed effects. Several limitations should be considered when interpreting the findings. First, the relatively small sample size in the quasi-experimental phase limits the generalizability of the results. Second, participants were recruited from treatment and support centers in Tehran, which may limit the applicability of the findings to other regions and demographic groups. Most importantly, the follow-up period was limited to one month; therefore, the durability of the intervention effects and their longer-term impact could not be determined. In addition, the use of self-report instruments for part of the data collection may have introduced response bias. Based on the preliminary findings, the developed psychoeducational empowerment package may be considered for further evaluation as an adjunctive intervention in counseling centers, hospitals, comprehensive health service centers, social emergency services, and mental health clinics. Further studies with larger and more diverse samples and longer follow-up periods are recommended to examine the generalizability and sustainability of the observed effects. Training psychologists, counselors, and other mental health professionals in the implementation of the package may also be considered following further evidence of its efficacy. In addition, involving individuals with lived experience alongside mental health professionals in the development of suicide-prevention and rehabilitation programs may help align interventions more closely with the needs and challenges of this population.

Disclosure Statements

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Conflict of interest

This study did not have any conflict of interest for the authors

Ethical considerations

Ethical approval for the study was obtained from the National Ethics Committee under the code IR.ARUMS.REC.1399.425. Participants were informed about the study procedures and their voluntary participation, and informed consent was obtained before data collection.

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