



# The Impact of Group Cognitive Behavioral Therapy on Resilience, Well-Being, Life Satisfaction, and Loneliness of Psychological Counseling Students: A Mixed Method Study

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## Abstract

When individuals face difficulties in solving their problems, they often seek support from mental health professionals. However, obtaining support for their own issues can be more challenging for these professionals. For this reason, studies to improve the mental health of psychological counselors, one of the mental health professionals, should be included. This study explores the impact of cognitive behavior-based group counseling on life satisfaction, psychological well-being, social emotional loneliness, and psychological resilience among third-year psychological counseling (PC) students. Additionally, the study evaluated the participants' opinions on group counseling practices. Using an intervention design and explanatory sequential model, the study involved 24 PC students divided into experimental and control groups. The experimental group attended 10 group counseling sessions and a subsequent focus group interview. Independent groups t tests, two-factor ANOVA, and content analysis were used for evaluation. The results revealed no significant difference in social emotional loneliness between the groups. However, the experimental group exhibited notable improvements in life satisfaction, psychological well-being, and psychological resilience, with these gains maintained in follow-up assessments. Qualitative data also revealed that students' psychological health was better after the group. It was stated by the students that the experiences during the group process were instructive and useful. Considering the positive effect of group counseling on students' mental health, it is recommended that universities, especially those with mental health programs, increase the number of applied courses. Employing experienced group counseling academics can better prepare psychological counselors, boosting their confidence and easing their workforce transition.

**Keywords** Group counseling · Psychological resilience · Psychological well-being · Life satisfaction · Social emotional loneliness

## Introduction

Psychological counseling is a professional process designed to help individuals address their emotional, social, academic, and career-related challenges while supporting their personal development (Gladding, 2018). This process focuses on building a trusting relationship between the counselor and the client, allowing the client to discover their own potential. The primary goal of psychological counseling is to help individuals gain a deeper understanding of themselves, enhance their problem-solving skills, and ultimately improve their overall quality of life (Corey, 2016).

The primary goal of psychological counseling services is to support the holistic development of individuals and help them realize their potential. This goal is central to all areas of psychological counseling and guidance. Counselors are regarded as professionals equipped with the necessary knowledge and skills to provide these services (Kepçeoğlu, 1999). An effective psychological counsellor should possess a strong theoretical foundation and practical experience gained through numerous counseling sessions. Therefore, individual and group counseling practice courses are offered at the undergraduate, master's, and doctoral levels in the psychological counseling and guidance departments of universities (Büyükgöze-Kavas, 2011). Group counseling is a professional therapeutic process aimed at enhancing interpersonal relationships; focusing on members' feelings, values, and attitudes; and helping each member achieve behavioral goals. It is conducted by a counselor trained in this field (Voltan-Acar, 1993).

In group counseling, voluntary members express themselves on an emotional level through open discussions. The topics in this type of counseling are not predetermined, with spontaneity playing a significant role. The group leader must have both individual counseling skills and a strong understanding of group dynamics (Ohlsen, 1988). For students in psychological counseling programs, developing and practicing both individual and group counseling skills is crucial. Research indicates that group counseling has positive effects on participants' psychological health (Bakalım & Taşdelen Karçkay, 2017; Ümmet & Yalın, 2020). One such effect is life satisfaction. The concept of life satisfaction, first introduced by Neugarten in 1961, refers to the outcome of comparing a person's desires (what they want) with their reality (what they have) (Karabulut & Özer, 2003). Additionally, life satisfaction reflects how individuals assess their overall quality of life on the basis of their own criteria (Diener & Suh, 1997).

Yalom and Leszcz (2020) reported significant improvements in self-perception and life satisfaction among individuals participating in group counseling. Their research demonstrated that group counseling provided emotional support, fostered empathy, and enhanced self-awareness. Corey et al. (2018) investigated the effects of group counseling on young adults and reported that it improved self-expression and understanding of others during the process. These developments contributed to an increase in life satisfaction. Similarly, a study by Bakalım and Taşdelen Karçkay (2017) revealed that group counseling enhanced positive emotions, happiness, and life satisfaction among counseling students.

Another variable closely related to life satisfaction is psychological well-being (Demir et al., 2021). Psychological well-being encompasses the ability to cope with

existential challenges, such as progressing toward goals, forming positive relationships, and pursuing personal growth (Keyes et al., 2002). Individuals with high levels of intellectual well-being generally experience greater life satisfaction, whereas those with high levels of emotional well-being tend to experience positive emotions more frequently. Conversely, individuals with low psychological well-being are more likely to evaluate their lives negatively (Diener et al., 1999). Research has shown that group psychoeducation programs designed to enhance psychological well-being positively impact psychological counselor candidates (Ümmet & Yalın, 2020). In a study by Evans et al. (1984), it was found that group counseling sessions not only increased participants' life satisfaction but also significantly reduced feelings of loneliness.

Loneliness is defined as a distressing experience that occurs when a person perceives their social relationships as insufficient in quantity or quality (De Jong-Gierveld & Van Tilburg, 2006). It can stem from a lack of meaningful connections and includes situations where existing relationships fall below desired or acceptable levels, preventing the achievement of the desired intimacy (De Jong Gierveld, 1987). Weiss (1973) identified two types of loneliness, highlighting that they involve qualitatively different experiences and behaviors. Emotional loneliness is associated with feelings of anxiety and isolation. According to Weiss, emotionally lonely individuals frequently assess others for their potential to fulfill necessary relational needs (p. 21). On the other hand, social loneliness is characterized by feelings of boredom, aimlessness, and marginality. Loneliness also encompasses difficulties in social interactions, inadequate social relationships, challenges in decision-making, and a tendency to focus on one's own or others' shortcomings. Consequently, loneliness is a significant factor in predicting mental health.

Group counseling practices have been shown to reduce feelings of loneliness (Alimoradi et al., 2016; Yazdanbakhsh et al., 2016). In a meta-analysis aimed at reducing loneliness, Masi et al., (2011) reported that group counseling is effective because of the increased social support and interaction it provides. Psychological resilience is another variable that is frequently studied alongside loneliness (Yelpaze, 2021). Psychological resilience is defined as an individual's ability to adapt and cope with adverse experiences (Block & Kremen, 1996). Individuals with high psychological resilience tend to describe themselves as less lonely and hopeless, and they are less likely to engage in life-threatening behaviors (Rew et al., 2001). Research has demonstrated that psychological resilience negatively predicts loneliness, indicating a strong interrelationship between the two variables (Güloğlu & Kararmak, 2010; Yelpaze, 2021). Sağar (2022) reported that group counseling practices enhance students' psychological resilience. Similarly, a study by İme and Ümmet (2024) concluded that cognitive behavior-based group counseling increases both psychological resilience and emotional flexibility.

Cognitive behavioral therapy (CBT) is a structured therapy approach that focuses on how thoughts influence emotions and behaviors, and it is widely preferred today. CBT utilizes methods based on learning theories and principles of cognitive psychology, incorporating both cognitive and behavioral techniques, as well as problem-solving skills (Özcan & Çelik, 2017). The primary goal of CBT is to identify and address problematic or unrealistic thoughts and to understand their impact on the individual (Ofiaz & Demiralp, 2007). Research indicates that CBT is effective for

various psychological disorders, whether applied individually or in group settings. It also helps reduce feelings of loneliness while enhancing psychological resilience and well-being (Bengisoy et al., 2019; İme & Ümmet, 2024; Käll et al., 2020). Therefore, CBT-based group counseling practices are expected to positively impact counseling students' psychological resilience, well-being, life satisfaction, and loneliness.

Students entering the counseling profession often face unresolved issues from their families of origin or past trauma. Addressing and resolving these issues is crucial for enhancing their psychological health and professional competence. While it is argued that educators should identify and address issues related to professional competence (Johnson et al., 2008), many counselor training programs fall short in this area. It is essential for those providing personal therapy to maintain harmony in both their personal and professional lives and to have a clear understanding of healthy living. However, individuals pursuing counseling careers frequently struggle with unresolved psychological problems. Counselor education programs need to implement a systematic approach to assess and improve students' well-being (Harris, 2010). There is a noticeable lack of studies in the literature that examine students' psychological well-being, life satisfaction, and psychological resilience within counseling education.

For the quality of counseling services, it is essential that counselors possess positive self-evaluations, a sense of continuous growth and development, and a belief in the meaning and purpose of life. They should also establish quality relationships with others, effectively manage their lives, and develop a strong sense of self-determination (Fava & Tomba, 2009). The greater the psychological resilience, well-being, and life satisfaction of future psychological counselors are, the more effective their counseling will be. Psychological counseling is crucial for mental health, and if counselors experience psychological problems that disrupt their mental health, it can negatively impact societal well-being and national development. Therefore, implementing both individual and group counseling practices in counselor education programs is vital for strengthening students' psychological well-being (Ültanır, 2005).

When individuals face difficulties in solving their problems, they often seek support from mental health professionals. However, obtaining support for their own issues can be more challenging for these professionals (Bearse et al., 2013). An examination of undergraduate programs in Psychological Counseling and Guidance (PCG) and Psychology departments in Turkey reveals a lack of practices aimed at improving students' mental health. Research indicates that life satisfaction, psychological well-being, psychological resilience, and loneliness are interrelated and that group counseling positively affects life satisfaction, psychological resilience, and well-being while reducing loneliness. However, studies that address these variables collectively, apply CBT-based interventions to psychological counseling students, and use mixed methods are lacking. Existing experimental studies often have qualitative shortcomings, such as failure to explore students' opinions on the benefits they gained from the process or their experiences after the intervention. Additionally, there is more emphasis on evaluating the effects of group interventions on the basis of solution-oriented or reality therapy.

To address this gap in the literature, this study aimed to achieve two objectives. The first objective was to examine the effects of CBT-based group counseling prac-

tices on life satisfaction, psychological well-being, social emotional loneliness, and psychological resilience among counseling students. The second objective was to evaluate the opinions of students who participated in group counseling practices. On the basis of these objectives, the study sought to answer the following questions:

- (1) Is there a significant difference between the pretest and posttest scores for life satisfaction, psychological well-being, social emotional loneliness, and psychological resilience among students who participated in group counseling practices compared with those who did not?
- (2) Is there a significant difference between the posttest and follow-up test scores for life satisfaction, psychological well-being, social emotional loneliness, and psychological resilience among students who participated in group counseling practices compared with those who did not?
- (3) For students participating in group counseling practices;
  - (a) What are their feelings at the end of the group sessions?
  - (b) What are their experiences with group counseling practices?
  - (c) How does their mental state after the group counseling sessions compare to their state before starting the sessions?

## Method

### Research Design

The study employs a mixed-methods approach, integrating both quantitative and qualitative methods. The first stage uses a  $2 \times 3$  mixed design with experimental and control groups, including pretest, posttest, and follow-up measurements (Büyüköztürk, 2018). In this design, participants undergo measurements related to the dependent variables before and after the experimental intervention (Karasar, 2009).

In the second stage, focus group interviews were conducted with students in the experimental group to evaluate their experiences with the group counseling process. A phenomenological design, a qualitative research method, was used to explore phenomena that are known but not deeply understood (Yıldırım & Şimşek, 2013).

This study can be assessed within the framework of the intervention design, an advanced mixed-method design aimed at examining a research problem by integrating qualitative data into an experimental or intervention trial (Creswell, 2021, p. 43). Additionally, the study employed an explanatory sequential design, where quantitative data were collected first, followed by qualitative research to further explain the quantitative results (Creswell, 2021).

### Participants

The study was conducted with third-year students from the Department of Psychological Counseling and Guidance at the university affiliated with the researcher(s) via a convenience sampling method. Initially, these students received theoretical instruc-

tion on group counseling as part of their course. Subsequently, 12 volunteer students were assigned to the experimental group, and 12 were assigned to the control group. Among the 24 participants, 5 (20.8%) were male, and 19 (79.2%) were female. The students' ages ranged from 21 to 30 years, with a mean age of 22.54 years.

## Data Collection Tools

### Brief Psychological Resilience Scale

The scale, developed by Smith et al. (2008) and adapted into Turkish by Doğan (2015), measures psychological resilience. The PSS is a 6-item, 5-point Likert-type self-report instrument. After reversing the coded items, higher scores on the scale indicate greater psychological resilience. The internal consistency reliability coefficient of the scale ranges from 0.80 to 0.91. In this study, the Cronbach's alpha value of the scale was 0.89.

### Psychological Well-Being Scale

The scale, developed by Diener et al. (2009) and adapted into Turkish by Telef (2013), consists of 8 items and is rated on a 7-point Likert scale. Higher scores indicate greater psychological resources and strengths. The factor loadings of the scale items range from 0.61 to 0.77. The internal consistency coefficient, as measured by Cronbach's alpha, was 0.87 for the original scale. In this study, the Cronbach's alpha value for the scale was 0.83.

### Life Satisfaction Scale

The scale, developed by Diener et al., (1985) and adapted into Turkish by Dağlı and Baysal (2016), consists of a single factor with 5 items and uses a 5-point Likert scale. The internal consistency of the scale, as measured by Cronbach's alpha, was 0.88, and the test-retest reliability was 0.97. In this study, the Cronbach's alpha value for the scale was 0.84.

### Social-Emotional Loneliness Scale for Adults

The scale, developed by DiTommaso et al. (2004), includes three subscales: social loneliness, family loneliness, and romantic loneliness. It comprises a total of 15 items rated on a 7-point Likert scale. Adapted into Turkish by Akgül (2020), the scale has internal consistency coefficients of 0.74, 0.76, and 0.83 for the social, family, and romantic subscales, respectively, and test-retest reliability coefficients of 0.88, 0.83, and 0.91, respectively. In this study, the Cronbach's alpha values were 0.84 for the total scale, 0.80 for the family subscale, 0.87 for the social subscale, and 0.88 for the romantic subscale.

## Focus Group Interview Questions

The researcher(s) posed three interview questions to the students who participated in group counseling. These questions addressed their feelings at the end of the group sessions, their experiences during the group counseling process, and their psychological state following the completion of the group counseling.

## Procedure

All procedures were conducted in accordance with the Declaration of Helsinki. The study received approval from the Artvin Çoruh University Scientific Research and Publication Ethics Committee (No: E-18457941-050.99-125283). After permission was obtained, during the spring semester of 2023–2024, the theoretical component of the group counseling course was taught to third-year students in the Psychological Counseling and Guidance Program at the university from February to March. At the end of March, 12 volunteer students were assigned to the experimental group, and 12 nonvolunteer students were assigned to the control group. The Life Satisfaction, Psychological Resilience, Psychological Well-Being, and Social-Emotional Loneliness scales were administered to both groups. The purpose of the assessment was explained to the students, and they were asked to respond voluntarily and honestly. Group psychological counseling sessions were conducted with the experimental group until the end of May, whereas the control group received no intervention.

A total of 10 sessions were conducted, each lasting between 90 and 120 min. At the beginning of the sessions, activities were organized to facilitate introductions and establish individual and group goals. In subsequent sessions, students' goals were addressed individually, with problems being addressed via CBT techniques. The group leader encouraged members to share and support each other. In the final session, students' group experiences and goals were evaluated, and the "love bombardment" activity was used to ensure that members were left with positive feelings (Corey, 2016). At the end of May, the scales were administered again to both the experimental and control groups. A focus group interview was conducted with the experimental group, which lasted approximately 45 min. A follow-up test was administered to all the students at the end of July (two months later).

## Data Analysis

SPSS 25 software was used to analyze the quantitative data. Independent samples t tests and two-factor ANOVA were employed to assess differences between pre-test and posttest scores, as well as posttest and follow-up test scores. The normality assumptions required for these analyses were met. The skewness and kurtosis values were examined for normality, with values ranging from  $-1.5$  to  $+1.5$  for all scales, which Tabachnick et al. (2013) consider normal. Independent samples t tests were used to determine whether there were statistically significant differences between two independent groups on the basis of their means. Two-way ANOVA tests the effectiveness of the experimental procedure in a two-factor mixed design, evaluating the impact of treatment groups and repeated measurements over time (Büyükoztürk,

2018). The findings section details the analyses performed and the assumptions met for these tests.

For the qualitative data, the interviews were first transcribed. The students' responses were analyzed via content analysis, which aims to uncover the concepts and relationships that explain the collected data. The data were divided into meaningful sections through coding, and concepts were developed and grouped into specific themes (Yıldırım & Şimşek, 2013). To ensure the reliability of the analysis, two independent experts reviewed the coding lists and themes. It is crucial for coding to be performed by experts other than the researchers to maintain objectivity. To enhance consistency, the data were coded by two different authors, and the agreement between the coders was assessed via Miles and Huberman's (1994) formula:  $\text{agreement}/(\text{agreement} + \text{disagreement}) \times 100$ . The resulting coder reliability coefficient was 84.32. According to Miles and Huberman (1994), the coder agreement should be at least 80%. The codings were reviewed, and corrections were made to address any inconsistencies identified through discussions with the other coders.

## Ethics

This research adhered to the principles of the Helsinki Declaration of 1975, as updated in 2000. Approval for the study was obtained from the Artvin Çoruh University Scientific Research and Ethics Review Committee.

## Results

In the study, effect sizes (Cohen's *d*) and statistical power calculations were made for the scales used. These calculations are given below:

### PWBS (Psychological Well-Being Scale)

- *Experimental Group (Pretest vs. Posttest)*: Cohen's *d*=3.54, Power=1.00.
- *Control Group (Pretest vs. Posttest)*: Cohen's *d*=0.85, Power=0.92.

### LSS (Life Satisfaction Scale).

- *Experimental Group (Pretest vs. Posttest)*: Cohen's *d*=2.40, Power=1.00.
- *Control Group (Pretest vs. Posttest)*: Cohen's *d*=0.74, Power=0.86.

### SELS (Social Emotional Loneliness Scale)

- *Experimental Group (Pretest vs. Posttest)*: Cohen's *d*=0.94, Power=0.97.
- *Control Group (Pretest vs. Posttest)*: Cohen's *d*=0.18, Power=0.22.

### PRS (Psychological Resilience Scale)

- *Experimental Group (Pretest vs. Posttest)*: Cohen's  $d=1.39$ , Power=1.00.
- *Control Group (Pretest vs. Posttest)*: Cohen's  $d=0.37$ , Power=0.58.

Overall, the experimental group demonstrated large effect sizes and achieved high statistical power across all scales, while the control group showed more moderate effect sizes and lower power, particularly for the SELS and PRS.

Table 1 presents the arithmetic means and standard deviations of the pretest, posttest, and follow-up test scores for the experimental and control group students on the Life Satisfaction, Psychological Well-Being, Social Emotional Loneliness, and Psychological Resilience scales.

The bar graph representation of the mean scores of the scales applied to the control group in the pretest, posttest and follow-up test is given in Fig. 1.

The average scores of the control group in the pre-test, post-test and follow-up test are shown in the bar graph in Fig. 2.

The mean pretest scores for the experimental and control groups were 42.17 and 41.33, respectively. An independent samples  $t$  test revealed no statistically significant difference between these groups ( $t=0.271$ ,  $p>.05$ ). Similarly, the mean pretest scores for life satisfaction were 13.08 for the experimental group and 15.50 for the control group, with the  $t$  test showing no significant difference ( $t=-1.808$ ,  $p>.05$ ). These results indicate that the pretest mean scores for psychological well-being and life satisfaction were not significantly different between the experimental and control groups. Consequently, to examine differences in these variables, posttest and pretest score changes were compared via the independent samples  $t$  test. The results of this analysis are presented in Table 2.

When examining Table 2, the differences in posttest and pretest scores between the experimental and control groups reveal significant differences in terms of psychological well-being [ $t(22)=2.138$ ,  $p<.05$ ] and life satisfaction [ $t(22)=2.678$ ,  $p<.05$ ]. The mean differences in scores for psychological well-being ( $\bar{x}=10.33$ ) and life satisfaction ( $\bar{x}=6.25$ ) in the experimental group were greater than those in the control group ( $\bar{x}=4.08$  and  $\bar{x}=1.33$ , respectively). On the basis of these findings, it can be concluded that the life satisfaction and psychological well-being of students who participated in group counseling increased.

The pretest mean scores of the experimental and control groups on the social emotional loneliness scale were 53.5 and 36, respectively. The independent samples  $t$  test revealed a statistically significant difference between these two groups ( $t=2.712$ ,  $p<.05$ ). The mean pretest scores for psychological resilience in the experimental and control groups were 14.08 and 18.92, respectively. An independent samples  $t$  test also revealed a statistically significant difference between these two groups ( $t=-2.710$ ,  $p<.05$ ). These findings indicate that the pretest mean scores of the experimental and control groups on both the social emotional loneliness scale and the psychological resilience scale are significantly different from each other. Therefore, since the distribution was normal and the variances were equal, the differences between the groups were analyzed via two-factor ANOVA, and the results are presented in Table 3.

**Table 1** Arithmetic mean and standard deviation values of the pre-test, post-test, and follow-up test scores for the experimental and control groups

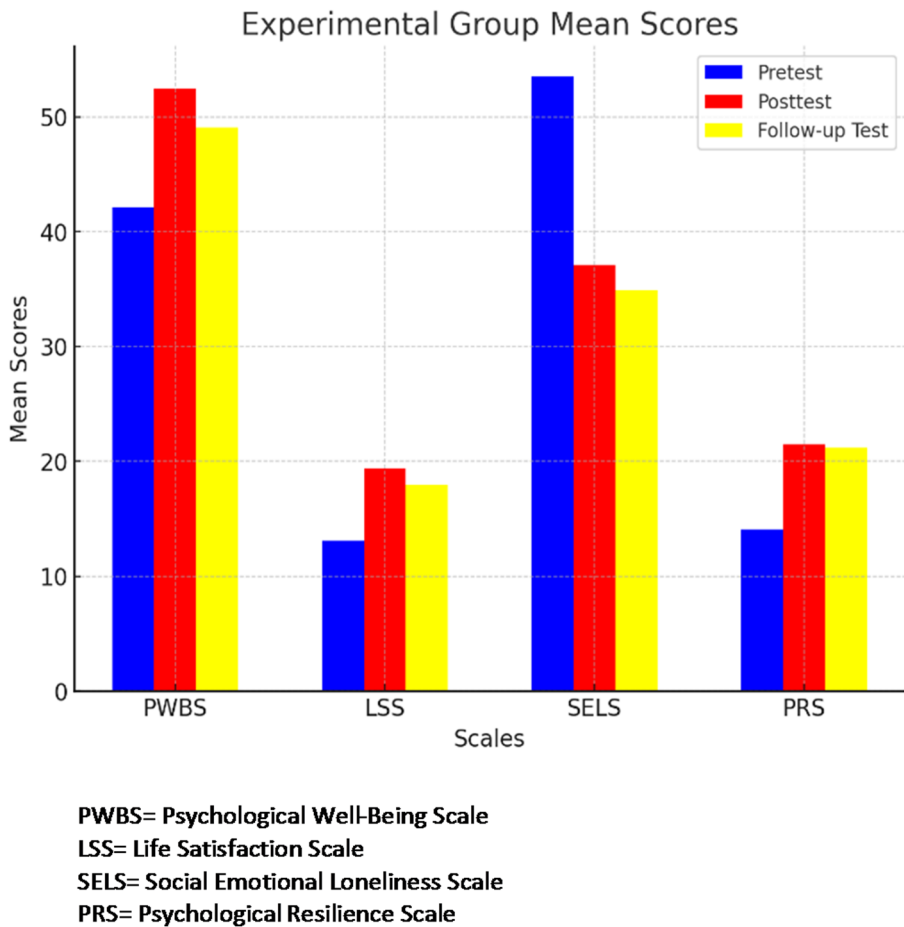
|                                                                                                                                                                           | Experimental Group |       |           |       | Control Group  |       |                |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------|-----------|-------|----------------|-------|----------------|-------|
|                                                                                                                                                                           | Pretest            |       | Posttest  |       | Follow-up test |       | Follow-up test |       |
|                                                                                                                                                                           | $\bar{x}$          | Ss    | $\bar{x}$ | Ss    | $\bar{x}$      | Ss    | $\bar{x}$      | Ss    |
| PWBS                                                                                                                                                                      | 42.17              | 3.95  | 52.50     | 2.65  | 49.08          | 3.96  | 45.42          | 4.46  |
| LSS                                                                                                                                                                       | 13.08              | 2.64  | 19.33     | 3.27  | 17.92          | 2.64  | 16.83          | 3.61  |
| SELS                                                                                                                                                                      | 53.50              | 17.82 | 37.08     | 23.11 | 34.92          | 11.34 | 37.00          | 13.75 |
| PRS                                                                                                                                                                       | 14.08              | 2.47  | 21.50     | 6.76  | 21.17          | 5.42  | 20.17          | 4.04  |
| <i>LSS</i> Life Satisfaction Scale, <i>SELS</i> Social Emotional Loneliness Scale, <i>PRSP</i> Psychological Resilience Scale, <i>PWBS</i> Psychological Well-Being Scale |                    |       |           |       |                |       |                |       |
|                                                                                                                                                                           |                    |       |           |       |                |       | 20.67          | 3.45  |

When Table 3 is examined, the analysis of variance indicates no significant difference in the total scores of social-emotional loneliness between the pretest and posttest scores of the students ( $F[1,44]=2.33, p>.05$ ), between the experimental and control groups ( $F[1,44]=3.03, p>.05$ ), or in the interaction between test scores and the experimental-control groups ( $F[1,44]=2.98, p>.05$ ). However, there was a significant difference in the total scores of psychological resilience according to the pretest and posttest scores of the students ( $F[1,44]=8.99, p<.05$ ), as well as in the interaction between the test scores and the experimental-control groups ( $F[1,44]=4.55, p<.05$ ). The mean psychological resilience score of the students in the experimental group increased from the pretest ( $\bar{x} = 14.08$ ) to the posttest ( $\bar{x} = 21.50$ ). In contrast, the mean psychological resilience scores of the students in the control group were relatively stable, with a pretest mean of  $\bar{x} = 18.92$  and a posttest mean of  $\bar{x} = 20.17$ . These findings indicate that there was no significant change in the social-emotional loneliness levels of the students who participated in the group counseling practice, but there was a significant improvement in psychological resilience in favor of the group participants.

The posttest mean scores for life satisfaction in the experimental and control groups were 19.33 and 16.83, respectively. The independent samples *t* test revealed no statistically significant difference between these two groups ( $t=1.780, p>.05$ ). Similarly, the posttest mean scores on the social-emotional loneliness scale for the experimental and control groups were 37.08 and 37, respectively. However, the independent samples *t* test revealed no statistically significant difference between these groups ( $t=0.011, p>.05$ ). The posttest mean scores on the psychological resilience scale for the experimental and control groups were 21.50 and 20.17, respectively. The independent samples *t* test also revealed no statistically significant difference between these two groups ( $t=0.586, p>.05$ ). These results indicate that the posttest mean scores for life satisfaction, social-emotional loneliness, and psychological resilience did not differ significantly between the experimental and control groups. Consequently, an independent samples *t* test was employed to analyze whether there were any differences between the groups in these three variables. For this purpose, differences between the follow-up test and posttest scores were calculated, the groups were compared, and the results are presented in Table 4.

As shown in Table 4, the follow-up test and posttest score differences of the students do not significantly differ in terms of life satisfaction [ $t(22)=-1.184, p>.05$ ], social emotional loneliness [ $t(22)=0.873, p>.05$ ] or psychological resilience [ $t(22)=-0.914, p>.05$ ] according to the experimental and control groups. According to these findings, the life satisfaction, social emotional loneliness and psychological resilience of the students who participated in the group counseling practice did not change over the eight-week period, and the group practice had a lasting effect.

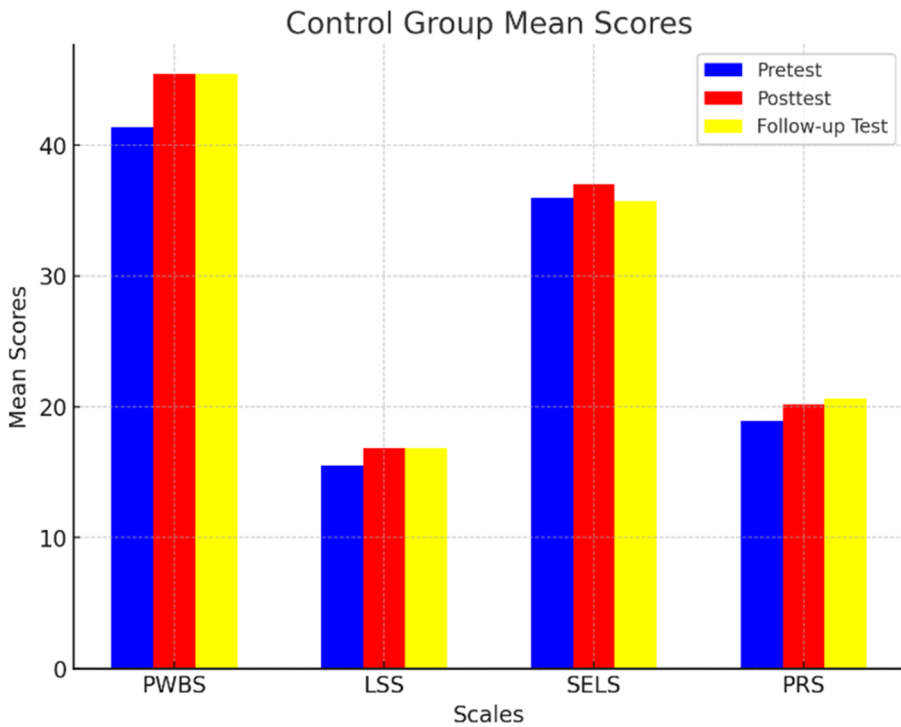
The mean posttest scores for the experimental and control groups were 52.50 and 45.41, respectively. The independent samples *t* test revealed a statistically significant difference between these two groups ( $t=4.731, p<.05$ ). This result indicates that the posttest mean scores of the experimental and control groups were significantly different. Therefore, the difference between the groups (given the normal distribution and equal variances) was analyzed via two-factor ANOVA, and the results are presented in Table 5.



**Fig. 1** Mean scores of the experimental group on the scales

When Table 5 was examined via analysis of variance, there was no significant difference in the total psychological resilience scores of the students according to the follow-up test-final test scores ( $F[1,44]=2.159, p>.05$ ) or the interaction between the test scores and the experimental-control group ( $F[1,44]=2.159, p>.05$ ). According to this finding, the psychological well-being of the students who participated in group counseling did not change during the eight-week period, and group practice had a lasting effect.

To further support the study's results with qualitative findings, a focus group interview was conducted with the students who participated in the group counseling sessions. Three distinct questions were coded, and these codes are explained below in three themes. The themes and codes derived from the students' responses are summarized in Table 6. Since some students provided more than one response, the number of codes exceeded the number of participants. Additionally, quotations from two students related to each theme are provided. In these quotations, the abbreviations S1, S2... S12 are used to identify the students.



**PWBS= Psychological Well-Being Scale**

**LSS= Life Satisfaction Scale**

**SELS= Social Emotional Loneliness Scale**

**PRS= Psychological Resilience Scale**

**Fig. 2** Mean scores of the control group on the scales

**Table 2** Independent samples t test results for differences between posttest and pretest scores on the psychological well-being and life satisfaction scales by group

|                             | Group        | N  | $\bar{x}$ | S     | sd | t     | p     |
|-----------------------------|--------------|----|-----------|-------|----|-------|-------|
| 1. Psychological Well-Being | Experimental | 12 | 10.33     | 4.70  | 22 | 2.138 | 0.044 |
|                             | Control      | 12 | 4.08      | 8.97  |    |       |       |
| 2. Life Satisfaction        | Experimental | 12 | 6.25      | 4.65  | 22 | 2.678 | 0.014 |
|                             | Control      | 12 | 1.33      | 14.33 |    |       |       |

*Feelings at the End of the Sessions:* All of the students expressed happiness about having the opportunity to share their experiences and problems. Additionally, six students mentioned feeling sad that the group would no longer be able to come together. Three students reported feeling relieved because they were able to give and receive mutual support. Below are quotes from two of the students.

**Table 3** ANOVA results for pretest and posttest scores, and total scores of social emotional loneliness and psychological resilience scales by experimental and control groups

| Source of Variance                 | Sum of Squares | Sd | Average Squares | F     | <i>p</i> | $\eta^2$ |
|------------------------------------|----------------|----|-----------------|-------|----------|----------|
| <b>Social Emotional Loneliness</b> |                |    |                 |       |          |          |
| Pretest/Posttest                   | 713.021        | 1  | 713.021         | 2.332 | 0.134    | 0.050    |
| Group (Experimental/Control)       | 927.521        | 1  | 927.521         | 3.034 | 0.089    | 0.065    |
| Test X Group                       | 910.021        | 1  | 910.021         | 2.977 | 0.091    | 0.063    |
| Error                              | 13451.917      | 44 | 305.725         |       |          |          |
| Total                              | 96281.000      | 48 |                 |       |          |          |
| <b>Psychological Resilience</b>    |                |    |                 |       |          |          |
| Pretest/Posttest                   | 225.333        | 1  | 225.333         | 8.993 | 0.004    | 0.170    |
| Group (Experimental/Control)       | 36.750         | 1  | 36.750          | 1.467 | 0.232    | 0.032    |
| Test X Group                       | 114.083        | 1  | 114.083         | 4.553 | 0.038    | 0.094    |
| Error                              | 1102.500       | 44 |                 |       |          |          |
| Total                              | 18204.000      | 48 |                 |       |          |          |

**Table 4** Results of the independent sample t test for differences between follow-up and posttest scores on life satisfaction, social-emotional loneliness, and psychological resilience scales, categorized by group

|                                | Group        | <i>N</i> | $\bar{x}$ | <i>S</i> | <i>sd</i> | <i>t</i> | <i>p</i> |
|--------------------------------|--------------|----------|-----------|----------|-----------|----------|----------|
| 1. Life Satisfaction           | Experimental | 12       | -1.42     | 2.54     | 22        | -1.184   | 0.249    |
|                                | Control      | 12       | 000       | 3.28     |           |          |          |
| 2. Social-Emotional Loneliness | Experimental | 12       | -2.17     | 18.71    | 22        | -0.162   | 0.873    |
|                                | Control      | 12       | -1.25     | 5.88     |           |          |          |
| 3. Psychological Resilience    | Experimental | 12       | -0.33     | 2.27     | 22        | -0.914   | 0.370    |
|                                | Control      | 12       | 0.50      | 2.20     |           |          |          |

**Table 5** ANOVA results for differences in total scores on the psychological well-being scale between follow-up and posttest, according to experimental and control groups

| Source of Variance              | Sum of Squares | Sd | Average Squares | F      | <i>p</i> | $\eta^2$ |
|---------------------------------|----------------|----|-----------------|--------|----------|----------|
| <b>Psychological Well-Being</b> |                |    |                 |        |          |          |
| Pretest/Posttest                | 35.021         | 1  | 35.021          | 2.159  | 0.149    | 0.047    |
| Group (Experimental/Control)    | 346.688        | 1  | 346.688         | 21.372 | 0.000    | 0.327    |
| Test X Group                    | 35.021         | 1  | 35.021          | 2.159  | 0.149    | 0.047    |
| Error                           | 713.750        | 44 | 16.222          |        |          |          |
| Total                           | 1122203.0      | 48 |                 |        |          |          |

*“On one hand, I’m sad, but on the other hand, I’m happy. I’m sad because we had such a nice, pleasant, and sincere environment. However, I’m happy because I was able to resolve some of my problems.” (S2).*

*“I feel happy and relieved that the sessions are over. I am happy because I had the experience of group counseling in such an environment. Maybe I would never have done this otherwise—this was my first time. I feel relieved because we talked about our problems in this setting.” (S4).*

**Table 6** Qualitative themes and codes

| Theme               | Code (n)                                                                                                                                                             |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Feelings            | Happy (12)<br>Sad (6)<br>Relaxed (3)                                                                                                                                 |
| Group Experiences   | Learning by doing and living (10)<br>Developing counseling skills (10)<br>Strengthening social interaction (3)<br>Application experience (2)<br>New perspectives (1) |
| Psychological State | Feeling well and safe (9)<br>Helping others (4)<br>No change (3)<br>Opening yourself (2)<br>Feeling functional (1)                                                   |

*Group Counseling Experiences:* The majority of the students (10 out of 12) indicated that the group counseling process significantly contributed to their learning by allowing them to practice and refine their counseling skills. This hands-on experience not only solidified their theoretical knowledge but also enhanced their ability to apply counseling techniques in real situations. In addition to the professional benefits, some students noted that the sessions strengthened their friendships and deepened their bonds with fellow participants (4 students). A few students also mentioned gaining practical experience (2 students) and new perspectives (1 student) through the process.

All of the students expressed that they found the group counseling experience both beautiful and exciting. They appreciated the opportunity to work closely with their peers in a supportive environment, which fostered both personal and professional growth. Below are quotes from two students that reflect these experiences:

*“It was a good experience for me too. The practical aspects of the lessons made our learning more permanent. We supported each other and learned things we did not know before.” (S6).*

*“The fact that group counseling was applied using CBT techniques and that we also took CBT as an elective course taught us how to practically apply these techniques. Additionally, our friendships strengthened as we learned about each other’s problems and worked together to find solutions. This brought us closer. It was a valuable experience for me.” (S7).*

*Psychological State After Group Counseling,* the majority of the students (9 out of 12) reported an improvement in their psychological state after the group counseling sessions compared with before. They noted feeling safer and more secure as a result of the counseling process. Additionally, some students (4 out of 12) found that mutual support—both giving and receiving—beneficial for their well-being. Three students indicated that they did not experience any significant psychological changes. A few students also mentioned that group counseling helped them open up more comfortably (2 students) and feel more functional (1 student). The following quotations illustrate these experiences:

*"The first day I came here, my feelings were a bit more complicated. However, during the process, I realized that the things I was worried about were actually things that could be solved. I felt better while helping the group members. At the end of the counseling, what made me feel the best was being able to help my friends." (S9).*

*"I also feel better than before the counseling. I believe that being helped and being able to help others."*

## Discussion

Research revealed that the psychological resilience, psychological well-being, and life satisfaction scores of the experimental group, which participated in group counseling practices, were significantly better than those of the control group. This positive effect persisted throughout the follow-up test. However, there was no significant change in social emotional loneliness among the students.

Qualitative interviews with students from the experimental group revealed that the group counseling process was both personally and professionally beneficial. They reported improvements in their psychological state, feeling better and safer as a result of the counseling. Additionally, group counseling practices were noted to contribute to students' learning through hands-on experience, enhance their psychological counseling skills, and help them gain practical experience.

In terms of life satisfaction, research has shown that group counseling can have a positive impact. For example, Karimi et al. (2019) reported that group counseling related to quality of life reduced stress severity and increased life satisfaction. Similarly, Bakalın and Taşdelen Karçkay (2017) reported that group counseling enhanced students' positive emotions, happiness, and life satisfaction levels among psychological counseling students. These findings align with the results of the current study.

Other studies support the effectiveness of group counseling in improving life satisfaction via various therapeutic approaches. For example, studies by Gündoğdu (2019), Kim and Kim (2010), Odacı and Berber Çelik (2017), and Verbruggen and Sels (2010) revealed that different therapy approaches in group counseling increased life satisfaction. Specifically, cognitive behavioral therapy (CBT) has also been shown to be effective in enhancing life satisfaction, as demonstrated by Eng et al. (2005); Rupita et al. (2020); and Peipert et al. (2022). These results suggest that group counseling, particularly when it is based on a specific therapeutic approach, positively influences life satisfaction.

In this study, CBT-based group counseling was found to significantly enhance both psychological well-being and psychological resilience. This finding is consistent with similar research. For example, Şahin and Türk (2021) reported that a CBT-based group psychoeducation program improved students' psychological resilience, although it did not affect subjective well-being. İme and Ümmet (2024) reported that CBT-based group counseling increased both psychological resilience and emotional flexibility among adolescents. Additionally, Heydarpour et al. (2018) reported that reality therapy-based group counseling improved the psychological resilience and

well-being of mothers with mentally disabled children. In a study by Sağar (2022), which employed solution-focused therapy with university students, group counseling was shown to enhance psychological resilience. These results align with other studies demonstrating the effectiveness of group counseling in improving psychological resilience (Kurniawan et al., 2022; Madina & Dasinsingon, 2020). Overall, the findings from these studies are consistent with the results of the present study.

Maton (1988) reported that participants in three different self-help groups benefited from group counseling, expressing their level of satisfaction with the group experience. Furthermore, the provision of social support and friendship was positively associated with psychological well-being. Howell et al. (2015) demonstrated that clients with chronic pain improved their pain acceptance and psychological well-being through hope-focused counseling. Similarly, Muqodas et al. (2020) reported that guidance and counseling services enhance the psychological well-being of pre-service teachers, helping them view life events more positively and leading to greater life satisfaction.

In another study involving adolescents, Naeim et al. (2021) reported that a group counseling intervention using a therapeutic approach significantly improved the psychological well-being of participants in the experimental group. These findings align with the current research, highlighting that psychological resilience and well-being are positively impacted by group counseling practices.

Notably, social emotional loneliness has not been extensively examined in the context of group psychological counseling, with more focus typically being placed on loneliness as a variable. Evans et al. (1984) reported that loneliness decreased and life satisfaction increased as a result of group counseling. In Koçak's (2005) study, an emotional expression training program was implemented for university students, and it was observed that the participants' levels of loneliness decreased as a result of group work. Maranata et al. (2019) reported that group counseling via CBT helped university students manage their emotions and reduce their loneliness. Alimoradi et al. (2016) also reported that CBT-based group counseling reduced loneliness and hopelessness among divorced women. Yildiz and Duyan (2022) reported a decrease in participants' perceptions of loneliness following group therapy with university students. These studies differ from the current research findings. This discrepancy may be attributed to the focus on social emotional loneliness in this study. During the group counseling sessions, more emphasis was placed on the individual problems brought to the group and on the goal of psychological empowerment. Additionally, although no significant difference was found, the social emotional loneliness scores of the experimental group decreased more in the posttest and follow-up tests than did those of the control group. These findings suggest that the impact of group counseling on loneliness may vary depending on the sample group.

The qualitative findings of the study corroborated the experimental results. At the conclusion of the sessions, the students expressed feelings of happiness and relief due to their ability to share problems and support one another. Group counseling facilitated practical experience, enhanced knowledge of counseling skills, and promoted experiential learning. Additionally, the students reported feeling psychologically well, safe, and functional and noted that they developed skills in helping others and self-disclosure.

A review of the literature reveals limited research on students' perceptions following group counseling. Bakalım and Taşdelen Karçkay (2017) reported that in postgroup counseling, students developed trust, increased self-awareness, improved their integration of practice and theory, gained counseling skills, and learned to assist others. These findings align with the qualitative results of the current study. Overall, group counseling practices appear to provide significant personal and professional benefits to students.

### Limitations and Recommendations for Future Research

This study has several limitations. This study was conducted with third-year students from the Counseling and Guidance Department at a university in Turkey, which means that the findings may be specific to this particular student population. The study was also conducted with a small sample group. To increase the generalizability of the results, future research could include samples from different universities or involve mental health professionals from various countries. Comparative studies could explore differences between Turkish culture and other cultures.

The study utilized a mixed-method approach, combining experimental and phenomenological techniques. Future research could incorporate longitudinal or cross-sectional designs and examine different variables. For example, some studies have shown that CBT is effective in reducing disorders such as anxiety and depression (Bengisoğlu et al., 2019; Johnco et al., 2014). In this context, future studies could apply a group CBT program to students or adults with mental disorders and investigate its effects.

The scales used in this study limited the assessment of students' life satisfaction, psychological well-being, resilience, and social-emotional loneliness. Given that social-emotional loneliness has not been extensively studied in the context of group counseling, further research on this topic is recommended. Additionally, while this study focused on CBT-based group counseling, future research could explore the effects of different therapeutic methods on mental health professionals.

Given the positive impact of group counseling on students' life satisfaction, psychological well-being, and psychological resilience, it is recommended that universities, especially those with mental health programs, increase the number of practical courses offered. Additionally, the guidance provided by academics supervising group counseling courses in Turkey often lacks the depth required for expertise in specific therapeutic approaches. Such studies are typically conducted at the master's and doctoral levels (Avcı et al., 2020). Since very few university graduates hold master's or doctoral degrees, enhancing the practical skills of undergraduate students could significantly benefit the country's well-being, peace, and economy.

Therefore, both in Turkey and abroad, it is advisable to introduce courses at the undergraduate level that focus on developing counseling skills and provide more hands-on practice. These courses could be offered by the Psychological Counseling and Guidance Department faculty as part of applied or elective courses aimed at improving psychological well-being, resilience, and life satisfaction. Additionally, employing academics with expertise in group counseling can help ensure that more

psychological counselors are well prepared and confident in their professional abilities, thereby supporting their transition into the workforce.

## Conclusion

In conclusion, the study revealed significant differences in life satisfaction, psychological well-being, and psychological resilience scores between students from the psychology counseling department who participated in group counseling and those who did not. The scores of the students who participated in the practice increased, and this improvement was maintained in the follow-up test and supported by the qualitative findings. The positive impact of the applied course underscores the importance of incorporating more practical applications in this area.

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**Data Availability** Data will be available on request.

## Declarations

**Conflict of interest** No conflict of interest exists for this manuscript for the author.

**Ethical Approval** The study protocol has been approved by Artvin Çoruh University Scientific Research and Ethical Review Board (E-18457941-050.99-125283). The study was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its following updates.

**Consent to Participate** Informed consent was obtained from all the individual participants that were included in the study.

## References

- Acar, N. V. (1993). To what extent are exercises needed in group counseling? *Hacettepe University Journal of Faculty of Education*, 9(9), 169–172.
- Akgül, H. (2020). Adapting social and emotional loneliness scale (Selsa-S) to Turkish culture: Relevance and reliability. *Yalova Journal of Social Sciences*, 10(21), 54–69.
- Alimoradi, S., Rafienia, P., & Sabahi, P. (2016). Effect of cognitive-behavioral group therapy on the hopeless and loneliness among divorced women. *Journal of Research and Health*, 6(2), 213–221.
- Avcı, D., Poyrazlı, Ş., & Gençoğlu, C. (2020). An assessment of the graduate education in psychological counseling and guidance programs in turkey: Views of graduate students. *Journal of National Education*, 49(228), 175–213.
- Bakalm, O., & Taşdelen Karçkay, A. (2017). Effect of group counseling on happiness, life satisfaction and positive negative affect: A mixed method study. *Journal of Human Sciences*, 14(1), 624–632. <https://doi.org/10.14687/jhs.v14i1.4377>
- Bearse, J. L., McMinn, M. R., Seegobin, W., & Free, K. (2013). Barriers to psychologists seeking mental health care. *Professional Psychology: Research and Practice*, 44(3), 150.
- Bengisoy, A., Özdemir, M. B., Erkivanc, F., Şahin, S., & İskifoğlu, T. Ç. (2019). The content analysis of the research articles about cognitive behavioral therapy between 1997–2018. *Turkish Journal of Psychological Counseling and Guidance*, 9(54), 745–793.

- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2), 349–361.
- Büyüköze-Kavas, A. (2011). An evaluation of individual and group counseling practices. *Turkish Journal of Educational Sciences*, 9(2), 411–431.
- Büyüköztürk, Ş. (2018). *Handbook of data analysis for social sciences*. Pegem Akademi.
- Corey, G. (2016). *Theory and practice of counseling and psychotherapy*. Cengage Learning.
- Corey, M. S., Corey, G., & Corey, C. (2018). *Groups: Process and practice*. Cengage Learning.
- Creswell, J. W. (2021). *Qualitative research methods: Qualitative research and research design according to five approaches* (3rd Edition, S. B. Demir, Trans.). Ankara: Eğğiten Kitap.
- Dağlı, A., & Baysal, N. (2016). Adaptation of the satisfaction with life scale into turkish: The study of validity and reliability. *Electronic Journal of Social Sciences*, 15(59), 1250–1262. <https://doi.org/10.17755/esosder.75955>
- De Jong Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology*, 53, 119–128.
- De Jong Gierveld, J., & Yan Tilburg, T. G. (2006). A 6-item scale for overall, emotional, and social loneliness: Confirmatory tests on survey data. *Research on Aging*, 28(5), 582–598. <https://doi.org/10.1177/0164027506289723>
- Demir, R., Tanhan, A., Çiçek, İ., Yerlikaya, İ., Kurt, S. Ç., & Ünverdi, B. (2021). Predictors of quality of life: Psychological well-being and life satisfaction. *Education for Life*, 35(1), 192–206.
- Demiralp, M., & Ofllaz, F. (2007). Cognitive behavioral therapy techniques and psychiatric nursing practice. *Anatolian Journal of Psychiatry*, 8(2), 132–139.
- Diener, E., & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social Indicators Research*, 40, 189–216.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302.
- Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D. W., & Oishi, S. (2009). New measures of well-being. *Well-Being: the Collected Works of Ed Diener*, 247–266. [https://doi.org/10.1007/978-90-481-2354-4\\_12](https://doi.org/10.1007/978-90-481-2354-4_12)
- DiTommaso, E., Brannen, C., & Best, L. A. (2004). Measurement and validity characteristics of the short version of the social and emotional loneliness scale for adults. *Educational and Psychological Measurement*, 64(1), 99–119. <https://doi.org/10.1177/0013164403258450>
- Doğan, T. (2015). Adaptation of the brief resilience scale into turkish: A validity and reliability study. *The Journal of Happiness & Well-Being*, 3(1), 93–102.
- Eng, W., Coles, M. E., Heimberg, R. G., & Safren, S. A. (2005). Domains of life satisfaction in social anxiety disorder: Relation to symptoms and response to cognitive-behavioral therapy. *Journal of Anxiety Disorders*, 19(2), 143–156. <https://doi.org/10.1016/j.janxdis.2004.01.007>
- Evans, R. L., Kleinman, L., Halar, E. M., & Herzer, K. (1984). Predicting change in life satisfaction as a function of group counseling. *Psychological Reports*, 55(1), 199–204.
- Fava, G. A., & Tomba, E. (2009). Increasing psychological well-being and resilience by psychotherapeutic methods. *Journal of Personality*, 77(6), 1903–1934. <https://doi.org/10.1111/j.1467-6494.2009.00604.x>
- Gladding, S. T. (2018). *Counseling: A comprehensive profession*. Pearson.
- Güllöğlu, B., & Karairmak, Ö. (2010). Self-esteem and resilience as the predictors of loneliness among university students. *Ege Education Journal*, 11(2), 73–88.
- Gündoğdu, R. (2019). The effect of solution-focused group counseling with psychological counselor candidates on solution-focused tendency and satisfaction with life. *Journal of Education and E-Learning Research*, 6(1), 26–37. <https://doi.org/10.20448/journal.509.2019.61.26.37>
- Harris, M. R. (2010). *The relationship between psychological well-being and perceived wellness in graduate-level counseling students*. Doctoral dissertation, Walden University, ABD.
- Heydarpour, S., Parvane, E., Saqzezi, A., Ziapour, A., Dehghan, F., & Parvaneh, A. (2018). Effectiveness of group counseling based on the reality therapy on resilience and psychological well-being of mothers with an intellectual disabled child. *International Journal of Pediatrics*, 6(6), 7851–7860. <https://doi.org/10.22038/ijp.2018.29464.2579>
- Howell, A. J., Jacobson, R. M., & Larsen, D. J. (2015). Enhanced psychological health among chronic pain clients engaged in hope-focused group counseling. *The Counseling Psychologist*, 43(4), 586–613. <https://doi.org/10.1177/0011000014551421>

- İme, Y., & Ümmet, D. (2024). The effects of cognitive behavioral psychological group counseling program on the psychological resilience and emotional flexibility of adolescents. *Current Psychology*, 43(10), 8885–8895. <https://doi.org/10.1007/s12144-023-05051-9>
- Johnco, C., Wuthrich, V. M., & Rapee, R. M. (2014). The influence of cognitive flexibility on treatment outcome and cognitive restructuring skill acquisition during cognitive behavioral treatment for anxiety and depression in older adults: Results of a pilot study. *Behavior Research and Therapy*, 57, 55–64. <https://doi.org/10.1016/j.brat.2014.04.005>
- Johnson, W. B., Elman, N. S., Forrest, L., Robiner, W. N., Rodolfa, E., & Schaffer, J. B. (2008). Addressing professional competence problems in trainees: Some ethical considerations. *Professional Psychology: Research and Practice*, 39(6), 589–599. <https://doi.org/10.1037/a0014264>
- Käll, A., Backlund, U., Shafran, R., & Andersson, G. (2020). Lonesome no more? A two-year follow-up of internet-administered cognitive behavioral therapy for loneliness. *Internet Interventions*, 19, 100301. <https://doi.org/10.1016/j.invent.2019.100301>
- Karabulut, Ö. Ö., & Özer, M. (2003). Life satisfaction in elderly individuals. *Geriatrics*, 6(2), 72–74.
- Karasar, N. (2009). *Scientific research method*. Nobel Press House.
- Karimi, Z., Rezaee, N., Shakiba, M., & Navidian, A. (2019). The effect of group counseling based on quality of life therapy on stress and life satisfaction in family caregivers of individuals with substance use problem: A randomized controlled trial. *Issues in Mental Health Nursing*, 40(12), 1012–1018. <https://doi.org/10.1080/01612840.2019.1609635>
- Kepçeoğlu, M. (1999). *Psychological counseling and guidance*. Alkım Publishing House.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007–1022.
- Kim, J. U., & Kim, H. J. (2010). The effects of the self-growth group counseling on self-esteem and life satisfaction of university students. *Journal of Fisheries and Marine Sciences Education*, 22(1), 123–140.
- Koçak, R. (2005). The effect of an emotional-expression education program on alexithymia and loneliness levels. *Turkish Psychological Counseling and Guidance Journal*, 3(23), 29–45.
- Kurniawan, A., Nuraini, P., & Indiaty, I. (2022). The effect of group counseling services with SFBC approach on increasing adolescent resilience. *Urecol Journal Part A: Education and Training*, 2(1), 25–34. <https://doi.org/10.53017/ujet.124>
- Madina, R., & Dasinsingon, N. (2020). The effect of task group counseling on student resilience. *International Journal of Innovations in Engineering Research and Technology*, 7(12), 218–222.
- Maranata, P., Wibowo, M. E., & Sugiharto, D. Y. P. (2019). The effectiveness of rational emotive behavior therapy group counseling to reduce loneliness through increasing self-adjustment for new college students. *Jurnal Bimbingan Konseling*, 8(2), 182–187. <https://doi.org/10.15294/jubk.v8i2.28491>
- Masi, C. M., Chen, H. Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review*, 15(3), 219–266. <https://doi.org/10.1177/1088868310377394>
- Maton, K. I. (1988). Social support, organizational characteristics, psychological well-being, and group appraisal in three self-help group populations. *American Journal of Community Psychology*, 16(1), 53–77.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
- Muqodas, I., Kartadinata, S., Nurihsan, J., Dahlan, T., Yusuf, S., & Imaddudin, A. (2020). Psychological well-being: A preliminary study of guidance and counseling services development of preservice teachers in Indonesia. In *International Conference on Educational Psychology and Pedagogy- Diversity in Education (ICEPP 2019)* (pp. 56–60). Atlantis Press.
- Naeim, M., Rezaeisharif, A., & Bagvand, S. G. (2021). The effect of group counseling therapy approach to psychological well-being of adolescent girls treated with methadone in iran: A randomized controlled trial. *Addictive Disorders & their Treatment*, 20(3), 189–193. <https://doi.org/10.1097/ADT.0000000000000238>
- Odacı, H., & Çelik, Ç. B. (2017). Group counseling on college students' internet dependency and life satisfaction. *Journal of Psychologists and Counsellors in Schools*, 27(2), 239–250. <https://doi.org/10.1017/jgc.2017.9>
- Ohlsen, M. (1988). *Group counseling* (2nd ed.). Holt, Rinehart, & Winston.
- Özcan, Ö., & Çelik, G. G. (2017). Cognitive behavioral therapy. *Türkiye Klinikleri J Child Psychiatry-Special Topics*, 3(2), 115–120.

- Peipert, A., Rodriguez-Quintana, N., & Lorenzo-Luaces, L. (2022). Outcomes of student trainee-delivered cognitive behavioral therapy (CBT) on internalizing symptoms, CBT skills, and life satisfaction. *International Journal of Cognitive Therapy*, 15(1), 94–113. <https://doi.org/10.1007/s41811-022-00131-3>
- Rew, L., Taylor-Seehafer, M., Thomas, N. Y., & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, 33(1), 3340.
- Rupita, R., Sugiharto, D. Y. P., & Sunawan, S. (2020). The effectiveness of CBT group counseling with stress inoculation training technique to improve students eustress and life satisfaction. *Jurnal Bimbingan Konseling*, 9(3), 182–188.
- Sağar, M. E. (2022). The effect of solution-focused group counseling on the resilience of university students. *E-International Journal of Educational Research*, 13(1), 103–117. <https://doi.org/10.19160/e-ijer.1034931>
- Şahin, H., & Türk, F. (2021). The impact of cognitive-behavioral group psycho-education program on psychological resilience, irrational beliefs, and well-being. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 39(4), 672–694. <https://doi.org/10.1007/s10942-021-00392-5>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194–200. <https://doi.org/10.1080/10705500802222972>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6, pp. 497–516). Pearson.
- Telef, B. B. (2013). The adaptation of psychological well-being into turkish: A validity and reliability study. *Hacettepe University Journal of Education*, 28(3), 374–384.
- Ültanır, E. (2005). The psychological counseling and guidance (pcg) as a profession and training of counselor in Turkey. *Mersin University Journal of the Faculty of Education*, 1(1), 102–111.
- Ümmet, D., & Yalın, H. S. (2020). Examination of a psycho-educational program for improving psychological well-being in university students. *Türkiye Journal of Social Research*, 24(3), 575–587.
- Verbruggen, M., & Sels, L. (2010). Social-cognitive factors affecting clients' career and life satisfaction after counseling. *Journal of Career Assessment*, 18(1), 3–15. <https://doi.org/10.1177/1069072709340516>
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. MIT Press.
- Yalom, I. D., & Leszcz, M. (2020). *The theory and practice of group psychotherapy*. Basic books.
- Yazdanbakhsh, N., Younesi, S. J., Aazimiyan, S., & Foroughan, M. (2016). Effects of group counseling based on logo therapy to decrease loneliness in elderly men. *Iranian Journal of Aging*, 11(3), 392–399. <https://doi.org/10.21859/sija-1103392>
- Yelpaze, İ. (2021). Cognitive flexibility and psychological resilience as predictors of loneliness of international university students. *Journal of Kırşehir Faculty of Education*, 22(1), 105–131. <https://doi.org/10.29299/kefad.886199>
- Yildiz, H., & Duyan, V. (2022). Effect of group work on coping with loneliness. *Social Work with Groups*, 45(2), 132–144. <https://doi.org/10.1080/01609513.2021.1990192>
- Yıldırım, A., & Şimşek, H. (2013). *Qualitative research methods in social sciences*. Seçkin Publishing.

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