



Studying the Effect of Life Review Therapy on Psychological Well-being and Anxiety of Teenage Girls in Divorced Families

Fatemeh Bay^{1*}, Alireza Ghorbani²

1- Assistant Professor, Department of Psychology, Faculty of Humanities and Physical Education, Gonbad Kavous University, Gonbad Kavous, Iran

2- Assistant Professor, Department of Social Sciences, Payam Noor University, Tehran, Iran

* Corresponding author's Email: Fatemeh.bay@gonbad.ac.ir

Abstract: Life review therapy, as part of a comprehensive therapy plan, helps people resolve their past conflicts, reconstruct their life stories, and accept their current situations. The present study was conducted to investigate the effectiveness of life review therapy in improving the psychological well-being and decreasing anxiety of teenage girls from divorced families in Gonbad-e Kavous (Iran). This study used a semi-experimental method with a pre-test, post-test, and control group. To this end, 20 teenage girls from divorced families covered by the Imam Khomeini Relief Committee in Gonbad-e Kavous were selected by purposive sampling. Then, 10 girls were assigned to each group, and they were asked to respond to the psychological well-being scale designed by Ryff (1995) and Ketel's (1970) anxiety scale. The mean of psychological well-being subscales, including self-acceptance ($P < 0.003$), having positive relationships with others ($P < 0.006$), and autonomy ($P < 0.01$) as well as overt and covert anxiety subscales ($P < 0.001$) was significant in the two experimental and control groups in the post-test phase. In other words, the results of covariance analysis indicated that the therapy improved psychological well-being and its components and decreased anxiety and its components in the experiment group compared to the control group ($P < 0.05$). Accordingly, it is suggested that all institutions supporting teenagers and their guardians use this cost-effective and practical method in the form of group interventions.

Keywords: Life review, Psychological well-being, Anxiety, Teenage girls, Divorced families

Introduction

Family is the most fundamental social base in any society (Tahirovic & Demir, 2018). Currently, owing to the high divorce rate, many young people experience the consequences of their parent's divorce (Roper et al., 2020). Divorce is a complex process involving a range of stressful life events that can affect children's coping capacities. One of the greatest shocks in the event of divorce is the experience undergone by the children born in such families (Eyo, 2018). Some authors view divorce as the "death" of marriage, where the children mourn the end of this relationship (Cabilar & Yilmaz, 2022). There is diverse evidence on gender differences regarding the impact of divorce; however, some believe that the long-term adverse effects of divorce may be greater for girls than for boys (Mechanic & Hansell, 1989). A large body of studies have investigated both positive and negative intrapersonal effects of divorce for individuals (Roper et al., 2020). Some studies have also demonstrated that the well-being of Asian adolescents is strongly affected by divorce, which often exerts negative effects on their health and well-

being ([Eyo, 2018](#); [Mechanic & Hansell, 1989](#)). If individuals have mental health and well-being, they can think of and choose solutions for the problems and adversities that they face ([Sadri Damirchi et al., 2017](#)). A new method to care for mental health is promoting well-being ([Organization, 2005](#)).

About 33 years ago, a model of psychological well-being was proposed by Ryff to examine the factors that were overlooked in the 1980s in producing positive human performance. [Ryff \(2014\)](#) reviewed over 350 empirical studies on psychological well-being conducted in the past decades. Longitudinal studies showed that high levels of psychological well-being and its consequences could be considered a therapeutic and protective factor against mental injuries ([Weiss et al., 2016](#)) and in preventing chronic diseases([Calderon Jr et al., 2020](#)).

The psychological well-being model proposed by [Ryff \(1989\)](#) was developed into six dimensions: autonomy, environmental mastery, purpose in life, personal growth, positive relations with others, and self-acceptance. These six dimensions were thought to collectively form the theoretical structure of PWB. Each factor has a unique and important aspect that contributes to the broader structure of PWB, namely, scales of psychological well-being (SPWB)([Calderon Jr et al., 2020](#)). Robust empirical literature revealed that individual differences in thematic and structural aspects of life narratives combined with motivational and emotional themes are the most important factors associated with people's well-being.([McLean, 2020](#)) According to Butler's theory (1963), one of the determining factors in an individual's quality of life is the method of reviewing the memories individuals have had during their lives ([Momeni, 2022](#)). This can lead to greater psychological well-being, and the lack of psychological well-being can induce anxiety ([Kleijn et al., 2018](#)).

Adolescents often feel guilty and anxious about their parents' divorce. They believe that their behavior or not meeting their parents' expectations is the cause of their parents' divorce. These judgments, along with the lack of security in the family, reflect the symptoms of anxiety ([Tahirovic & Demir, 2018](#)). In this regard, in a study conducted in (2018), the global prevalence of anxiety was reported to be 14.7%, with women being twice as affected as men by this disorder ([Nechita et al., 2018](#)). Anxiety is often a combination of an unknown fear and lack of control, along with a personality resulting from shame and embarrassment, which forms the basis of various anxiety disorders in individuals ([Batten, 2011](#)). During studies, children of divorce exhibit higher levels of anxiety, and these findings stress the need for therapeutic interventions in children of divorce whose anxiety should be considered([Hoyt et al., 1990](#)). Interestingly, among divorced parents with a history of dysfunctional relations, children reported a higher level of quality of life after their parents' divorce, suggesting that divorce may be effective for children, at least in this regard ([Til Ogut et al., 2021](#)). Education can have a positive effect on children's liberation from the parental conflict environment and causes children to start a new life with better

perspectives ([Eyo, 2018](#)). Life review refers to the process of thinking or talking about past experiences and memories ,whereby past conflicts can be resolved, and thus a new understanding of life can be achieved ([Butler, 1963](#)).

Life review therapy can be used in people with mental health problems ([Pinquart & Forstmeier, 2012](#)). Although life review has been developed for the elderly, the process of life review for people (of any age) can help a person control oneself, amend the situation, or finish and improve one's unfinished affairs. Moreover, the good feeling created at the end of this review may better enable people to deal with the losses in their lives ([Kleijn et al., 2018](#)). Studies conducted on memory and life review ([Westerhof & Bohlmeijer, 2014](#)) and narrative psychology ([Adler et al., 2015](#)) revealed that the past is subject to important interpretive processes. Instead of past events, the personal meaning given to them is of importance, so the way events are interpreted can be useful in regulating identity development, well-being, and mental health throughout life ([Westerhof & Slatman 2019](#)).

The purpose of life review intervention is to integrate positive and negative life events and memories in the form of a coherent story ([Kleijn et al., 2018](#)) and to present a harmonious view of the past, present, and future ([Haber, 2006](#)). Therefore, it is regarded as a structured method of recalling past memories and is generally concerned with different periods of life such as childhood, adolescence, and adulthood and a summary of life in the present ([Kleijn et al., 2018](#)).

As suggested by [Westerhof and Bohlmeijer \(2014\)](#) , the recalling memory and life review processes need further investigation. This can be partially achieved in the current research tradition with longitudinal studies and good interventions. The synergy of psychological research on autobiographical recall and life stories, along with examining the effects of such interventions on a different target group, leads to greater innovation in this field. Although life review therapy secures a special place in such ranges of interventions, unfortunately, existing interventional research is limited to investigating the effectiveness of this approach on elderly or sick people's problems. Over the years, it has been found that reminiscence and life review are important processes during the lifespan, not only at the end of life ([Westerhof et al., 2010](#)). In addition, it was found that people use reminiscence and life review for a wide range of adaptive and inconsistent functions ([Westerhof & Slatman 2019](#)). Life review is an effective therapy for adolescents who are striving to find their identity because they tend to resolve their intrapsychic conflicts and are seeking a new meaning for their experiences. Moreover, by reviewing experiences and cognitive reconstruction of important life events, a person gains a broader understanding during the process of life review. Hence, a life review is essentially a therapeutic process

that results in emotional, cognitive, and behavioral changes through constructing new insights ([Weiss, 1993](#)).

Life review therapy is a non-pharmacological therapy that focuses on a person's life experiences throughout the lifespan, which involves the process of looking back at the experienced life and evaluating the person. On the one hand, this process can help overcome an individual's previous conflicts and negative experiences, and on the other hand, it can also present a positive meaning to the subject's life ([Korte et al., 2012](#)). [Rachman \(1980\)](#) asserted that whenever an adverse or disastrous event such as a divorce occurs, people should recollect that event at that time and after that, but due to its adverse nature and disturbing emotional load, most people refuse to recollect and integrate them, which is referred to as cognitive inhibition. The purpose of life review therapy is to help people reduce cognitive inhibition and emotionally re-process intrusive thoughts related to the past ([Kazemian, 2012](#)). As [Westerhof and Slatman \(2019\)](#) stated, the way events are interpreted can be useful in regulating identity development, well-being, and mental health throughout life. The growing evidence of the positive results of psychological well-being along with its components and the reduced level of anxiety (overt, hidden) in people's mental health led us to investigate whether they can be improved via this approach in this target group (teenage girls from divorced families) or not.

Material and Methods

Study Design and Population

This is a semi-experimental type of study with a pre-test and a post-test along with a control group. The independent variable is the life review therapy which was received by the intervention group, and other teenagers were on the waiting list of the control group, while psychological well-being and anxiety were considered dependent variables. After obtaining permission and the notification and the announcement of the Imam Khomeini Relief Committee in Gonbad-e Kavous in 2022, 46 people were referred to Zolal Counseling Center in Gonbad-e Kavous. According to the criteria for entering the research, aged 13-18 years, living in a divorced family, providing written informed consent for participating in the research, and obtaining a medium to high score on Ketel's anxiety scale, finally 10 people were randomly selected among the referral people and assigned into the intervention group, and 10 people were placed in the control group. Moreover, 75% of these subjects lived under the supervision of their mothers. The criteria for exclusion were the lack of mental disorders and addiction of the parents, having any problem with participating in the sessions based on their parents' statements, and being absent more than two times in the therapy sessions.

Ethical Considerations: Following the ethical principles of research, this study was taken from a research project approved under file number (6/01/33) in the field of Psychology and the Faculty of Literature and Humanities at Gonbad-e Kavous University. To observe the ethical principles in this research, it was tried to collect the data after obtaining the participants' consent. Moreover, the participants were assured of the confidentiality of their personal information and providing results without specifying the names and details of participants' birth certificates.

Life Review Therapy Intervention

This intervention was implemented to improve the process of reviewing people's lives and educating them, focusing on recollecting special positive events from the past. This protocol was based on the life review protocol of [Forstmeier et al. \(2020\)](#) and [Haight and Webster \(1995\)](#), in which the structure, evaluation, comprehensiveness, and individuality were taken into account, and the whole life cycle of the person until the present moment was reviewed in 6 sessions for 6 weeks once per week. The first session was devoted to familiarizing the leader and the members with each other, setting common goals, stating the group rules, providing a general description of the structure of life review therapy, and listening therapy. The second session was about reviewing the structure of life, which is one of the first main parts of therapy. The questions related to the childhood and adolescent period were extracted from the life review book by [Haight and Haight \(2007\)](#). Moreover, childhood memories, discussions about those topics in the group (trust vs distrust, autonomy vs doubt, and the like), the time and place of birth, and the person the subjects were closer to were explained and presented. In the third session, questions about the stages of initiative against guilty feelings and constructiveness against feelings of inferiority were proposed. The fourth session was about reviewing adolescence memories and discussing topics in the present, focusing on gaining identity against role confusion (Do you have friends to talk to about your problems? Do you feel good about yourself as a teenager? Who do you want to resemble?). In addition, narrative encountering with the stressful life factor and the examination of "stuck points" were the second part of the main parts of the therapy, during which the areas of security, trust, strength, intimacy, and self-esteem were examined. The fifth session continued with the cognitive aspects of the life review sessions, addressed the dysfunctional thoughts ruminated occasionally by the patient, and helped them to transform them into useful thoughts using two strategies: Socratic dialogue to help people challenge dysfunctional thoughts and the formation of new useful thoughts in the form of a letter to oneself in childhood or teenage years when experiencing divorce in the family and stating some of the problems he/she faced.

The sixth session is related to life recovery and ending the therapy, which focuses on changes in behavior (social relations and pleasant activities). What has been your most important achievement throughout

your life? What were the most satisfying things in your life? In general, what life you suppose to have? What are you afraid of? All the positive points of each person's life were addressed with the help of other members of the group. Furthermore, an attempt was made to evaluate the negative aspects of a person's life through reframing, and the people's satisfaction level with the group was examined. The purpose of this meeting was to help people feel integrated, and the session came to an end after reviewing the treatment sessions by previous planning.

Research Tools

The Scale of Psychological Well-being (SPWB): The short version (18 items) of Riff's psychological well-being scale was designed in 1989 and revised in 2002. This version consists of 6 dimensions ([Manchiraju, 2020](#)). Items 9, 12, and 18 are the independence dimension, items 1, 4, and 6 constitute the mastery of the environment, items 7, 15, and 17 involve the personal growth factor, items 3, 11, and 13 constitute positive relations with others, items 5, 14, and 16 measure purpose in life, and items 2, 8, and 10 evaluate self-acceptance. The sum of the scores of these 6 dimensions was calculated as the overall psychological well-being score. This scale is a type of self-assessment tool answered on a 6-point continuum ranging from completely agree to completely disagree (one to six), and a higher score indicates a greater psychological well-being level. Moreover, 10 out of 18 items were scored directly, and 8 items were scored inversely. The internal consistency for the short version in the study by [Lee et al. \(2019\)](#) was 0.88, as reported by [Sefidi and Farzad \(2012\)](#). The correlation of the short version of the main scale has fluctuated from 0.7 to 0.89. In the present study, the internal consistency for the short version for self-acceptance was 0.63, positive relations with others was 0.81, autonomy was 0.63, mastery of the environment was 0.688, the purpose for life was 0.66, and individual growth was 0.55, while the total consistency turned out to be 0.54.

Ketel's Anxiety Scale: The Ketel anxiety scale was developed by Raymond Bernard Ketel. This scale is a 40-item questionnaire in which the first 20 items measure hidden anxiety (attribute), and the second 20 items measure overt anxiety (state). This test indicates the scores of total anxiety, hidden or overt anxiety, and the level of awareness or lack of awareness of the person regarding his/her anxiety. It should also be noted that a score between 4-6 denotes an average degree of anxiety, and a score between 0-3 indicates a calm, phlegmatic, unwavering, comfortable, and relaxed person. A score of 7-8 reflects a person who may be overtly an anxious neurotic, and a score of 9 or 10 indicates a person who overtly needs help, either to amend his/her situation, to consult, or have psychotherapy. Ismaili (1998) standardized the anxiety test on adolescents aged 14-18 years. In his study, he reported a reliability coefficient of 0.86 through retesting and a validity of 0.67 via the correlation of the sub-scales with the whole test. The reliability coefficient of the whole scale was 0.69 using the Cronbach's alpha method,

indicating an acceptable reliability index for the questionnaire sub-scales ([Kazemian, 2012](#)), and the Cronbach's alpha of the whole questionnaire was reported to be 0.63 in the current study.

Results

In the present study, the data were analyzed both at the descriptive and inferential levels. Then, the pre-test and post-test results of the intervention and control groups were investigated, and the descriptive statistics related to the variables were obtained, which are presented in Table 1. The results of demographic characteristics of teenage girls from divorced families indicated that the average age for the intervention group is between 13-18 years. In terms of education, 30% of teenage girls had 6 years of education, 30% had 8-10 years, and 40% had more than 10 years of education. Moreover, 75% lived with their mother, and the rest of them lived with their uncles and grandparents. Regarding the mother's occupation, 16 people (80%) were housewives, 10% were tailors, and 10% were self-employed. In terms of father's occupation, 2 persons (1.1%) were farmers, 1 (5.6%) was employer, 1 (5.6%) was retired, 5 persons (27.8 %) were workers, and 2 (11.1%) were unemployed.

As can be observed in Table 1, the descriptive statistical data for the research variables, including the mean and standard deviation are presented separately for the pre-test and post-test in the intervention and control groups.

Table 1. The Mean and Standard Deviation of the Pre-test and Post-test Scores of the Two Groups for Psychological Well-being and Anxiety

Variable	Group	Pre-test		Post-test	
		Mean	SD	Mean	SD
Self-acceptance	Experimental	12.00	2.21	13.90	2.72
	Control	12.10	4.040	10.90	2.72
Positive relations with others	Experimental	9.10	4.040	13.70	9.49
	Control	12.90	2.51	10.90	2.76
Autonomy	Experimental	13.10	1.91	19.70	16.11
	Control	12.90	4.14	13.10	4.040
Mastery of environment	Experiment	10.50	2.41	10.80	1.81
	Control	11.80	3.19	10.60	2.11
Purpose I life	Experimental	13.10	2.18	14.60	2.72
	Control	12.00	3.52	11.90	3.6270
Individual growth	Experimental	13.80	3.01	15.40	2.54
	Control	13.70	4.78	12.90	4.45
Total psychological well-being	Experimental	70.80	9.02	88.50	18.19
	Control	74.10	13.10	70.30	11.84
Overt anxiety	Experimental	24.10	4.26	20.90	3.45
	Control	25.90	7.65	25.70	4.62
Covert anxiety	Experimental	21.40	3.78	20.90	1.41
	Control	22.90	4.51	24.90	4.62
Total anxiety	Experimental	46.40	4.07	41.80	6.55
	Control	47.80	11.44	51.60	9.48

Based on the value of the t-test ($t=67.2$, $P=0.02$), the mean psychological well-being of girls from divorced families indicates a significant difference with 95% confidence after the effectiveness of the life review. Regarding the components of anxiety, both overt and covert anxiety components indicated a significant reduction in their mean after the implementation of life review therapy. In addition, according to the value of the t-test ($t=43.2$, $P=0.03$), the average anxiety of girls from divorced families exhibited a significant difference with 95% confidence after the life review intervention.

To select the appropriate statistical test, the Kolmogorov-Smirnov test was used first. Since this test indicated the normal distribution of anxiety and psychological well-being variables ($P \geq 0.05$, 0.13, 0.11), the statistical method of covariance analysis was used. As one of the assumptions of the covariance analysis is the equality of the covariance matrices for the studied groups (Kalantari, 2015, p. 262), the M Box test was separately calculated for the psychological well-being and anxiety of the teenage girls. It can be observed that the amount of error committed by the researcher in this test (i.e., sig.) is higher than 0.05%, so the null hypothesis is accepted, indicating the equality of the observed covariance matrices of the quantitative research variables, namely, psychological well-being and anxiety (Box's Test: 7.68, $P=0.08$). The significance tests of Pillai's Trace, Wilkes' Lambda, Hotelling's Trace, and Roy's largest root demonstrated that the effects of the desired variables are statistically significant. That is, there is a significant difference between the psychological well-being and anxiety of divorced girls based on the experimental and control groups, in which ($F=63.24$, $P=0.000$). In other words, the vectors of group means have a significant difference. On the other hand, statistical power also illustrates the chance of correctly rejecting a false hypothesis. Its high value means that the probability of rejecting the null hypothesis is extremely high, and the above results suggest the high power of the test ($PST=0.89$, 0.82). Additionally, the significant level of psychological well-being and anxiety of girls was examined via Leven's test (homogeneity of variances) (Levens test= 0.73, 27.1, $P=0.40$, 0.27).

Table 2. The Results of Covariance Analysis of Psychological Well-being and Anxiety Scores of Teenage Girls from Divorced Families

Sources	SS	DF	MS	F value	p	Power
Psychological well-being posttest	3162.95	2	1581.47	6.97	0.001	0.82
Anxiety pretest	6473.1	2	3236.55	42.79	0.001	0.99
R Squared= .235		Box's Test: 7.68 / $P: 0.08$, F:2.25/ Wilks, Lambda=4.09				
R Squared= -.682		Leven's Test: 0.73, 1.27 / $P: 0.40$ / 0.27/ Wilks, Lambda=15.34				

Since the significant level of the post-test in the anxiety and the psychological well-being scales is (0.001), which is less than 0.05, it can be concluded that there is a significant difference between the experimental and control groups with 99% confidence in the level of anxiety and the psychological well-being of girls from divorced families. In other words, the therapeutic effect of life review is effective.

Moreover, based on the adjusted coefficient of determination, it can be concluded that life review therapy has an effect on psychological well-being with an effect size of 0.235 and on anxiety with an effect size of -0.682 in the post-test. That is, 23% of the post-test scores in the psychological well-being variable and 68% of the anxiety scores were related to group membership. Among the 6 components of psychological well-being (autonomy, personality development, purpose in life, self-acceptance, mastery of the environment, and positive relations with others) and the two components (overt and hidden) of anxiety in divorced girls, the significance of *Wilks' lambda*, *Pillai's trace*, *Hotelling's trace*, and *Roy's largest root* test statistics indicated that the effects of the desired variables are statistically significant. That is, there is a significant difference between the components of psychological well-being ($F = 3.98$, $P < 0.001$) and anxiety of divorced girls ($F = 21.27$, $P < 0.001$) in the experimental and control groups. Table 3 presents the results of the multivariate analysis of covariance or MANCOVA when investigating the effect of therapy on increasing dimensions of psychological well-being and anxiety (overt, hidden) in the post-test stage.

Table 3. Comparing the Psychological Well-being and Anxiety Scores of Two Groups in the Post-test Stages

Variables	Hotelling's trace	Wilks' lambda	F	Hypothesis DF	Error DF	p	Effect size	Power
Psychological well-being	1.54	4.09	3.98	12	66	0.001	47.83	0.82
Anxiety in girls	2.43	15.34	21.27	4	70	0.001	85.11	0.99

According to the findings in Table 3, there is a significant difference ($P < 0.001$) in the mean scores of psychological well-being and anxiety scales of divorced girls in the experimental and control groups in the post-test stage. The statistical power of 0.99% reflects that the statistical accuracy of this test is excellent. In addition, the sample size was sufficient to test this hypothesis. Table 4 presents the results of the test for the comparison of the two groups in each subscale of psychological well-being and anxiety in the post-test stage.

Table 4. The Univariate Analysis Results of the Two Groups for the Scores of Psychological Well-being and Anxiety subscales in the Post-test Stage

Sources	SS	DF	MS	F	p	Effect size	Power
Purpose in life	2.45	2	1.22	2.71	0.95	0.1	0.05
Self-acceptance	276.42	2	138.21	6.84	0.003	13.68	0.89
Individual growth	66.27	2	33.13	2.17	0.12	4.34	0.41
Positive relations with others	1513.42	2	756.71	5.92	0.006	11.85	0.85
Mastery of environment	180.7	2	90.03	1.30	0.28	2.6	0.26
Autonomy	274.7	2	137.35	4.54	0.01	9.09	0.73
Overt	1310.2	2	650.513	18.65	0/000	37.31	0.99
Covert	1970.22	2	985.11	34.39	0.000	68.78	0.99
R Squared = - 0.631* - 0.475*0.197 *0.270 *0.243							

According to the results obtained in Table 4, the mean of the psychological well-being subscales, including self-acceptance ($P < 0.003$), having a positive relation with others ($P < 0.006$), and autonomy ($P < 0.01$) and overt and hidden anxiety subscales ($P < 0.001$) in both experimental and control groups is significant in the post-test stage. In other words, it can be stated that the life review therapy method has improved the scores of three subscales of psychological well-being (i.e., self-acceptance, positive relations, and autonomy) and anxiety components (overt and hidden) in the experimental group in the post-test phase. The effect of these interventions on reducing the anxiety dimensions (overt and hidden) in the post-test phase is 63% and 47%, respectively. Furthermore, the effect of these interventions on increasing the psychological well-being dimensions, including self-acceptance, having a positive relation with others, and autonomy is equal to 27%, 24%, and 19%, respectively, in the post-test phase.

Discussion

The present study demonstrated that life review therapy has a positive effect on some components of psychological well-being and reduces anxiety in adolescent girls living in divorced families. The results revealed the significant effect of the intervention on self-acceptance, positive relations with others, and autonomy as well as anxiety (overt and hidden) reduction. The results further indicated the effectiveness of life review therapy in the target group. One reason for this is that by conducting a life review, the lost but effective experiences of people are revealed, negative experiences are logically examined, positive experiences can be recalled by individuals, and re-interpretations of past experiences can be made. Furthermore, by reducing cognitive inhibitions and irrelevant mental ruminations, life reviews make teenagers feel valuable. When this therapy is implemented in a group, the dynamics and enthusiasm of the group members increase, and sharing each other's memories changes the teenagers' personal perception of life events, helps them gain integrity in the face of disappointment, and helps them solve their problems more effectively. This study is consistent with the findings of other studies, ([Korte et al., 2009](#); [Sadri Damirchi et al., 2017](#); [Weiss et al., 2016](#); [Westerhof & Slatman 2019](#)) in terms of the effectiveness of life review interventions. In this regard, no research was found to be directly related to the present study, but the following investigations are indirectly in line with the findings of the present study.

A randomized and controlled trial on the effect of life review (four weekly sessions) among chronic cancer patients in a hospice in China revealed positive effects on the dimensions of quality of life in the areas of support, negative emotions, existential distress, and value of life ([Xiao et al., 2013](#)). In another study in the Netherlands, combined life review therapy with LRT-MST autobiographical memory training was conducted on the ego integrity of cancer patients. The findings indicated the importance of

the issues related to people's well-being and the meaning of life. In addition to increasing the meaning of life, reviewing life also increases the well-being components ([Westerhof & Slatman 2019](#)). Furthermore, a study in the form of a randomized controlled trial in (2016) addressed the effectiveness of the intervention on psychological well-being among Chinese adults, the results of which displayed the effectiveness of the intervention on the people residing in China ([Choy & Lou, 2016](#)).

The results of another study conducted on elderly depression demonstrated a significant difference between the experimental and control groups after 4 weeks of training. In the post-test, those undergoing the therapy reported fewer depressive symptoms, less hopelessness, improved life satisfaction, and greater recall of specific events. Findings suggested that training in autobiographical memory for specific events may be one of the life review components that explains its effectiveness and can be a useful tool in psychotherapy with individuals([Serrano et al., 2004](#)).

The non-significance of three components of well-being in the research can be influenced by the psychological well-being model that focuses on growth throughout human life. The 6 dimensions of psychological well-being are related to age changes because psychosocial tasks and environmental challenges change as people grow older. Factors that induce psychological well-being include material conditions, family and social relationships, and social activities and roles, while other factors are related to aging changes([Stephoe et al., 2015](#)). In line with some studies that reported that the life review therapy approach could have a small effect on psychological well-being ([Korte et al., 2012](#)), in this research, we did not come up with significant results in the three components of well-being, including purpose in life, personal growth, and mastery of the environment in this target group. This discrepancy in the results can be influenced by different measurement tools, the number of life review therapy sessions (3, 4, or 6 sessions per week), different residential areas (private centers, sanatoriums, hospitals), different cultures (Netherlands, China, Iran), and different target groups, which can have a moderating effect on the results of the current study.

In terms of anxiety, the positive results were in line with a randomized controlled trial that was conducted for the clinical and economic evaluation of the life review intervention to prevent anxiety in the elderly, and the results indicated the effectiveness of this therapy as a cost-effective and available intervention that can prevent people's anxiety symptoms ([Korte et al., 2009](#)). These results are consistent with the reduction of anxiety and its components (overt, hidden) in the present study. Increasing research has also shown that rumination can play an important role in creating anxiety symptoms ([Olatunji et al., 2013](#)). In this regard, a study indicated that the anxiety level of teenagers from divorced families is higher ([Tahirovic & Demir, 2018](#)). Divorce is a source of stress; however, the divorce rate continues to

rise. It seems that researchers evaluate post-divorce adaptability based on the presence or absence of psychological well-being and indicators such as anxiety, quality of life, and resilience styles of people. By discussing the divorce experience, individuals will be able to go through it with awareness, so it will be easier for them to deal with it ([Cabilar & Yilmaz, 2022](#)). People can look at their lives, and even when facing adversity, they can discover their past as a source of inspiration ([Randall & McKim, 2008](#)). Therefore, for the development and implementation of psychotherapy interventions, it will be useful for people to be able to go through each stage of life via precise and correct knowledge of life stages and correct facing of the problems in each period.

Meanwhile, observational studies showed that life review therapy improves psychological well-being, self-esteem, and anxiety ([Ahn et al., 2012](#); [Ando et al., 2010](#); [Ando, 2008](#); [Weiss et al., 2016](#)).. However, judging by the number of primary results and filtered searches, we found that a substantial number of interventions related to life review focused on depression and not on anxiety, and the existing ones also focused on late-life anxiety or anxiety in the elderly. Since anxiety is still a mental issue and a physical phenomenon that affects physical and mental health, is conditioned or limited by everything, especially age, gender, religion, or culture, and is not detached from time, it does not disappear by itself ([Nechita et al., 2018](#)). Therefore, taking certain actions and implementing specific interventions are needed in different target groups in order to reduce anxiety; therefore, it is important that researchers pay attention to this problem.

One of the limitations of the current research was its cross-sectional design, which examined the positive effects of this intervention program on this target group at a specific point in time. Accordingly, it is not possible to generalize its long-term effect. Considering the sensitivity of the issue of divorce, it is suggested that future researchers examine the effectiveness of this intervention during longitudinal investigations, taking into account factors such as the duration of separation and the conflict between parents during divorce, which is important in parenting, especially the regulation of emotions ([Radetzki et al., 2021](#)). However, despite these limitations, this study used a more precise definition of life review therapy by adding more evidence, which includes studies with higher quality, mostly published after 2015. Moreover, as pointed out in [Westerhof and Slatman \(2019\)](#) research, one of the important issues for further research in the implementation stage is expanding thematic groups . Since this intervention approach has not been used in this target group to address this specific and important issue, it seems that the life review approach, in addition to its wide application for the elderly and sick people, is also valuable in this study with this age group by affecting some components of psychological well-being and reducing anxiety. The results suggested that teenage girls from divorced families experienced a significant decrease in anxiety along with an increase in well-being. It is suggested that future research

implement and test this intervention among individuals with different characteristics such as those with chronic illnesses or those who have lost their life partner and live alone. In addition, counseling centers or other supporting institutions can implement this intervention as part of a program for improving the mental health of divorced girls and women.

Conflict of interest: The authors declare that there is no conflict of interests with regard to the results of this study.

Financial sponsor: This project has been implemented with the approval and financial support of the research vice-chancellor of the university.

Acknowledgments: We hereby thank and appreciate all the people who participated in this study.

References

- Adler, J. M., Lodi-Smith, J., Philippe, F. L., & Houle, I. (2015). The Incremental Validity of Narrative Identity in Predicting Well-Being: A Review of the Field and Recommendations for the Future. *Personality and Social Psychology Review*, 20(2), 142-175. <https://doi.org/10.1177/1088868315585068>
- Ahn, S. H., An, Y. L., Yoo, Y. S., Ando, M., & Yoon, S. J. (2012). [Effects of a short-term life review on spiritual well-being, depression, and anxiety in terminally ill cancer patients]. *J Korean Acad Nurs*, 42(1), 28-35. <https://doi.org/10.4040/jkan.2012.42.1.28>
- Ando, M., Morita, T., Akechi, T., & Okamoto, T. (2010). Efficacy of short-term life-review interviews on the spiritual well-being of terminally ill cancer patients. *J Pain Symptom Manage*, 39(6), 993-1002. <https://doi.org/10.1016/j.jpainsymman.2009.11.320>
- Ando, M., Morita, T., Okamoto, T., & Ninotsaka, Y. . (2008). One-week Short-Term Life Review interview can improve spiritual well-being of terminally ill cancer patients. . *Psycho-oncology*, , 17((9),), 885–890. <https://doi.org/> <https://doi.org/10.1002/pon.1299>
- Batten, S. (2011). *Essentials of acceptance and commitment therapy*. Sage Publications.
- Butler, R. N. (1963). The life review: an interpretation of reminiscence in the aged. *Psychiatry*, 26, 65-76. <https://doi.org/10.1080/00332747.1963.11023339>
- Cabilar, B. Ö., & Yılmaz, A. E. (2022). Divorce and Post-divorce Adjustment: Definitions, Models and Assessment of Adjustment. *Psikiyatride Guncel Yaklasimlar*, 14(1), 1-11.

- Calderon Jr, R., Kim, G., Ratsameemonthon, C., & Pupanead, S. (2020). Assessing the adaptation of a Thai version of the Ryff Scales of Psychological Well-Being: A PLS-SEM approach. *Psychology*, 11(7), 1037-1053.
- Choy, J. C. P., & Lou, V. W. Q. (2016). Effectiveness of the Modified Instrumental Reminiscence Intervention on Psychological Well-Being Among Community-Dwelling Chinese Older Adults: A Randomized Controlled Trial. *The American Journal of Geriatric Psychiatry*, 24(1), 60-69. <https://doi.org/https://doi.org/10.1016/j.jagp.2015.05.008>
- Eyo, U. (2018). Divorce: Causes and Effects on Children. *Asian Journal of Humanities and Social Studies*, 6. <https://doi.org/10.24203/ajhss.v6i5.5315>
- Forstmeier, S., van der Hal, E., Auerbach, M., Maercker, A., & Brom, D. (2020). Life review therapy for holocaust survivors (LRT-HS): study protocol for a randomised controlled trial. *BMC psychiatry*, 20(1), 1-13.
- Haber, D. (2006). Life Review: Implementation, Theory, Research, and Therapy. *The International Journal of Aging and Human Development*, 63(2), 153-171. <https://doi.org/10.2190/DA9G-RHK5-N9JP-T6CC>
- Haight, B. K., & Haight, B. S. (2007). *The handbook of structured life review*. Health Professions Press.
- Haight, B. K., & Webster, J. D. (1995). *The art and science of reminiscing: Theory, research, methods, and applications*. Taylor & Francis.
- Hoyt, L. A., Cowen, E. L., Pedro-Carroll, J. L., & Alpert-Gillis, L. J. (1990). Anxiety and Depression in Young Children of Divorce. *Journal of Clinical Child Psychology*, 19(1), 26-32. https://doi.org/10.1207/s15374424jccp1901_4
- Kazemian, S. (2012). The effect of life review on the rate of anxiety in adolescent girls of the divorced families.
- Kleijn, G., Lissenberg-Witte, B. I., Bohlmeijer, E. T., Steunenbergh, B., Knipscheer-Kuijpers, K., Willemsen, V., Becker, A., Smit, E. F., Eeltink, C. M., Bruynzeel, A. M. E., van der Vorst, M., de Bree, R., Leemans, C. R., van den Brekel, M. W. M., Cuijpers, P., & Verdonck-de Leeuw, I. M. (2018). The efficacy of Life Review Therapy combined with Memory Specificity Training (LRT-MST) targeting cancer patients in palliative care: A randomized controlled trial. *PloS one*, 13(5), e0197277. <https://doi.org/10.1371/journal.pone.0197277>
- Korte, J., Bohlmeijer, E., Cappeliez, P., Smit, F., & Westerhof, G. (2012). Life review therapy for older adults with moderate depressive symptomatology: A pragmatic randomized controlled trial. *Psychological medicine*, 42(6), 1163-1173.

- Korte, J., Bohlmeijer, E. T., & Smit, F. (2009). Prevention of depression and anxiety in later life: design of a randomized controlled trial for the clinical and economic evaluation of a life-review intervention. *BMC Public Health*, 9(1), 250. <https://doi.org/10.1186/1471-2458-9-250>
- Lee, T., Sun, H.-F., & Chiang, H.-H. (2019). Development and validation of the short-form Ryff's psychological well-being scale for clinical nurses in Taiwan [Original Article]. *Journal of Medical Sciences*, 39(4), 157-162. https://doi.org/10.4103/jmedsci.jmedsci_191_18
- Manchiraju, S. (2020). Psychometric evaluation of the Ryff's Scale of psychological wellbeing in self-identified American entrepreneurs. *Journal of Business Venturing Insights*, 14, e00204. <https://doi.org/https://doi.org/10.1016/j.jbvi.2020.e00204>
- McLean, K. C., Syed, M., Pasupathi, M., Adler, J. M., Dunlop, W. L., Drustrup, D., Fivush, R., Graci, M. E., Lilgendahl, J. P., Lodi-Smith, J., McAdams, D. P., & McCoy, T. P. J. (2020). The empirical structure of narrative identity: The initial Big Three. *Journal of Personality and Social Psychology*, 119(4), 920–944. <https://doi.org/https://doi.org/10.1037/pspp0000247>
- Mechanic, D., & Hansell, S. (1989). Divorce, Family Conflict, and Adolescents' Well-Being. *Journal of health and social behavior*, 30, 105-116. <https://doi.org/10.2307/2136916>
- Momeni, K., Amani, R., Janjani, P. et al. (2022). Attachment styles and happiness in the elderly: the mediating role of reminiscence styles. *BMC Geriatrics*, 22(349). <https://doi.org/https://doi.org/10.1186/s12877-022-03053-z>
- Nechita, D., Nechita, F., & Motorga, R. (2018). A review of the influence the anxiety exerts on human life. *Rom J Morphol Embryol*, 59(4), 1045-1051.
- Olatunji, B. O., Naragon-Gainey, K., & Wolitzky-Taylor, K. B. (2013). Specificity of Rumination in Anxiety and Depression: A Multimodal Meta-Analysis. *Clinical Psychology: Science and Practice*, 20(3), 225-257. <https://doi.org/https://doi.org/10.1111/cpsp.12037>
- Organization, W. H. (2005). Promoting mental health: concepts, emerging evidence, practice: summary report [Internet]. Geneva: WHO.
- Pinquart, M., & Forstmeier, S. (2012). Effects of reminiscence interventions on psychosocial outcomes: A meta-analysis. *Aging & Mental Health*, 16(5), 541-558. <https://doi.org/10.1080/13607863.2011.651434>
- Rachman, S. (1980). Emotional processing. *Behaviour research and therapy*, 18(1), 51-60.
- Radetzki, P. A., Deleurme, K. A., & Rogers, S. M. (2021). The implications of high-conflict divorce on adult-children: Five factors related to well-being. *Journal of Family Studies*, 1-21. <https://doi.org/10.1080/13229400.2020.1754277>

- Randall, W. L., & McKim, E. (2008). *Reading our lives: The poetics of growing old*. Oxford University Press.
- Roper, S. W., Fife, S. T., & Seedall, R. B. (2020). The Intergenerational Effects of Parental Divorce on Young Adult Relationships. *Journal of Divorce & Remarriage*, 61(4), 249-266. <https://doi.org/10.1080/10502556.2019.1699372>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Ryff, C. D. (2014). Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10-28. <https://doi.org/10.1159/000353263>
- Sadri Damirchi, E., Ghomi, M., & Esmaeli Ghazi Valoii, F. (2017). Effectiveness of Life Review Group Therapy on Psychological Well-Being and the Life Expectancy of Elderly Women. *Yektaweb_Journals*, 12(3), 312-325. <https://doi.org/10.21859/sija.12.3.312>
- Sefidi, F., & Farzad, V. (2012). Validated measure of Ryff psychological well-being among students of Qazvin University of Medical Sciences (2009). *Journal of Inflammatory Diseases*, 16(1), 65-71.
- Serrano, J. P., Latorre, J. M., Gatz, M., & Montanes, J. (2004). Life review therapy using autobiographical retrieval practice for older adults with depressive symptomatology. *Psychol Aging*, 19(2), 270-277. <https://doi.org/10.1037/0882-7974.19.2.270>
- Stephoe, A., Deaton, A., & Stone, A. A. (2015). Subjective wellbeing, health, and ageing. *The Lancet*, 385(9968), 640-648. [https://doi.org/10.1016/S0140-6736\(13\)61489-0](https://doi.org/10.1016/S0140-6736(13)61489-0)
- Tahirovic, S., & Demir, G. (2018). Influence of Parental Divorce on Anxiety Level of Adolescents. In. <https://doi.org/10.5772/intechopen.71287>
- Til Ogut, D., Chavez, F. T., Tyc, V., & Patel, J. (2021). Protective Buffers of Effective Parental Cooperation and Communication for Offspring of Divorce. *Journal of Divorce & Remarriage*, 62(8), 640-656. <https://doi.org/10.1080/10502556.2021.1993021>
- Weiss, J. C. (1993). *A comparison of cognitive group therapy to life review group therapy with older adults*. West Virginia University.
- Weiss, L. A., Westerhof, G. J., & Bohlmeijer, E. T. (2016). Can We Increase Psychological Well-Being? The Effects of Interventions on Psychological Well-Being: A Meta-Analysis of Randomized Controlled Trials. *PloS one*, 11(6), e0158092-e0158092. <https://doi.org/10.1371/journal.pone.0158092>
- Westerhof, G., Bohlmeijer, E., & Webster, J. (2010). Reminiscence and mental health: A review of recent progress in theory, research and interventions. *Ageing and Society*, 30, 697-721. <https://doi.org/10.1017/S0144686X09990328>

- Westerhof, G. J., & Bohlmeijer, E. T. (2014). Celebrating fifty years of research and applications in reminiscence and life review: State of the art and new directions. *Journal of Aging Studies*, 29, 107-114. <https://doi.org/10.1016/j.jaging.2014.02.003>
- Westerhof, G. J., & Slatman, S. (2019). In search of the best evidence for life review therapy to reduce depressive symptoms in older adults: A meta-analysis of randomized controlled trials. *Clinical Psychology: Science and Practice*, 26(4), 11-11. <https://doi.org/10.1111/cpsp.12301>
- Xiao, H., Kwong, E., Pang, S., & Mok, E. (2013). Effect of a life review program for Chinese patients with advanced cancer: a randomized controlled trial. *Cancer nursing*, 36(4), 274-283.



This work is licensed under a [Creative Commons Attribution-Noncommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)