RESEARCH

INVESTIGATION OF POST-TRAUMATIC GROWTH AND RELATED FACTORS IN ELDERLY ADULTS' EXPERIENCE OF SPOUSAL BEREAVEMENT

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Abstract

Introduction: Spousal bereavement is an inevitable experience for elderly adults. Although it may have negative effects, spousal bereavement may also result into post-traumatic growth in the elderly. Studies on the relationships of such growth with different factors have revealed that psychosocial resources such as self-esteem, religious coping, and social support are related to the level of post-traumatic growth. Therefore, this study aimed to examine the relationship between these factors and post-traumatic growth in bereaved elderly.

Materials and Method: Participants included 163 bereaved people living in nursing homes (mean age=78.73±7.07, min-max=65–96). They completed the Socio-demographic Information Form and five self-report scales. Independent samples t-test and multivariate analyses of variance were performed to examine whether post-traumatic growth varies according to gender. Further, hierarchical regression analysis was conducted to determine the growth predictors.

Results: Results showed that widows reported a significantly higher level of growth, and being a woman predicted total growth and two subdimensions thereof. While negative religious coping predicted only total growth, positive religious coping predicted total growth and two subdimensions. Furthermore, perceived social support from friends predicted only total growth and that from significant others predicted total growth and two subdimensions. Self-esteem was not a growth predictor.

Conclusion: Because social support and coping strategies are related to post-traumatic growth, interventions focused on social support resources and coping process may be beneficial in facilitating growth in bereaved people. Moreover, supporting the elderly with basic everyday life skills will be functional in terms of preventive health policies.

Keywords: Aged; Widowhood; Posttraumatic growth, Psychological; Self-esteem; Social support

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ARAŞTIRMA

EŞİNİ KAYBETMİŞ YAŞLI BİREYLERİN TRAVMA SONRASI GELİŞİM DÜZEYLERİ İLE İLİŞKİLİ FAKTÖRLERİN İNCELENMESİ

Öz

Giriş: Çoğu yaşlı birey için kaçınılmaz bir yaşam olayı olan eş kaybı, olumsuz etkilere yol açabilmekle birlikte travma sonrası gelişim yaşanmasını da sağlayabilmektedir. Gelişimin değişik faktörler ile ilişkisini inceleyen araştırmalar benlik saygısı, dini baş etme ve sosyal destek gibi psikososyal kaynakların gelişim düzeyi ile ilişkili olduğunu göstermiştir. Bu nedenle, bu çalışmada eşini kaybetmiş yaşlı bireylerde bu faktörlerin travma sonrası gelişim düzeyi ile ilişkisi incelenmiştir.

Gereç ve Yöntem: Çalışmaya huzurevlerinde yaşayan 163 katılımcı dâhil edilmiştir (ortalama yaş=78.73±7.07, min-max=65–96). Katılımcılar sosyo-demografik bilgi formu ve beş öz bildirim ölçeği doldurmuşlardır. Travma sonrası gelişim ve alt alanlarının cinsiyete göre değişip değişmediğini belirlemek amacıyla bağımsız örneklemler t testi veçok değişkenli varyans analizi, gelişimin ve alt boyutlarınınyordayıcılarının belirlenmesi amacıyla hiyerarşik regresyon analizi kullanılmıştır.

Bulgular: Kadınların erkeklerden daha fazla travma sonrası gelişim bildirdiği ve kadın olmanın hem toplam gelişim puanı hem de gelişimin iki alt boyutunun yordayıcısı olduğu belirlenmiştir. Olumsuz dini baş etme yalnızca toplam gelişimi yordarken; olumlu dini baş etme, hem toplam gelişim hem de gelişimin iki alt boyutunun yordayıcısı olarak bulunmuştur. Arkadaşlardan alınan sosyal desteğin yalnızca toplam gelişimi; önemli diğerinden algılanan sosyal desteğin ise hem toplam gelişim hem de gelişimin iki alt boyutunu yordadığı belirlenmiştir. Benlik saygısı ise gelişimi ve alt alanlarını yordamamıştır.

Sonuç: Sosyal destek ve baş etme stratejilerinin gelişim ile ilişkili bulunması nedeniyle bu süreçlere odaklanan müdahalelerin kayıp yaşamış yaşlı bireylerin gelişim düzeylerini artırmak için faydalı olabileceği düşünülmüştür. Ayrıca yaşlı bireylerin temel günlük hayat becerileri konusunda desteklenmesi koruyucu sağlık politikaları açısından işlevsel olacaktır.

Anahtar sözcükler: Yaşlılık; Eş Kaybı; Travma sonrası gelişim; Benlik saygısı; Baş etme; Sosyal destek

INTRODUCTION

Bereavement is one of the most difficult developmental experiences during old age (1). Loss of a spouse may be traumatic forthe surviving spouse. Research has revealed that bereavement is accepted and viewed as trauma (2). Despite negative effects resulting from the life crisis or trauma, positive effects may also be experienced. Post-traumatic growth (PTG) refers to positive changes after compelling and stressful life experiences; it encompasses both coping mechanisms and ongoing experiences (3). Although there are many explanations for PTG, Tedeschi and Calhoun's Post-traumatic Growth Theory is the most comprehensive and accepted model. According to this model, PTG has three dimensions: changes in self-perception (SP), changes in relationships with others (RWO), and changes in philosophy of life (PL). These dimensions involve experiencing increased strength and self-efficacy about problems that may occur in the future, positive changes in interpersonal relationships and increased feelings of intimacy, a re-evaluation of life's priorities, and a deep existential perspective (4). It is crucial to struggle and make an effort to adjust to a traumatic life crisis to experience growth. Searching for meaning about the traumatic experience is important for PTG because an individual is prompted to make changes to former assumptions after the trauma (3). PTG is a process of change that can lead to a different perspective about life. Spousal bereavement may require reorganization of life and openness to experiences and struggles that would follow. Hence, the loss of a spouse may motivate elderly adults to change (5).

According to Tedeschi and Calhoun, factors such as personality traits, coping strategies, social resources of individuals, and socio-demographic variables can affect the level of PTG (3). Self-esteem is an important personal factor that plays a crucial role as a coping resource in adverse life events (6). Similarly, social support, another resource employed to face difficult life experiences, can stimulate PTG by providing a framework for changes in an individual's life (3). Religious coping strategies (RCOPE) are also associated with PTG in that they help make sense of the severe consequences of adverse life events. Positive religious coping (PRCOPE) is based on the notion of a secure relationship with God and the ability to find meaning in the struggle of life. On the contrary, negative religious coping (NRCOPE) reflects an insecure relationship with a more judgmental God, and vital crises are viewed as an individual self-examination. Although the term is headed by the word "negative," in fact, this process facilitates growth to the same extent as PRCOPE (7). Both coping strategies advance to growth by means of questioning and reframing both life and the crisis (8). In the socio-demographic context, the majority of related research indicates that women are experiencing more growth; however, findings concerning age vary, such that some researchers have reported that being younger is associated with growth, whereas others have proposed the opposite condition (9).

Owing to the increased likelihood of mortality as age progresses, spousal bereavement is an inevitable life crisis and source of complexity for the elderly. Such losses may be underestimated because of their developmental stage. However, changes and problems after the loss can be more distressing for elderly individuals, as they lead to altered economic and identity roles. In some cases, traditional social roles result in a lack of knowledge and skills to manage the tasks previously handled by the deceased spouse, which further complicates situations for the elderly (10). The literature on PTG is generally within the framework of chronic diseases, accidents, or terrorist attacks, whereas common life stressors such as spousal bereavement have often been neglected. Because of multiple studies have shown growth is possible after life challenging crisis, the first aim of this study was to examine the level of growth in the elderly bereaved people living in nursing homes. The study's second aim was to broaden our understanding of PTG in terms of which resources facilitate growth in this

population by identifying predictors of total PTG and its subdimensions. With reference to these aims, it was hypothesized that women would report greater levels of PTG than men, and that self-esteem, perceived social support, and RCOPE would be related to PTG and its subdimensions. A major strength of the study is that it is among the first to examine PTG in the context of typical life crises among a bereaved elderly population. The findings of this investigation could be significant for future research in this area, including interventions aimed at enhancing life satisfaction and taking protective measures for elderly people's mental health.

MATERIALS AND METHOD

Participants

The participants were recruited through nursing homes in Bursa (46%), İzmir (45.3%), Ankara (5.6%), and Eskişehir (3.1%).The criteria to participate in the present study included obtaining a score of 23 or more in the Standardized Mini Mental State Examination Test (SMMT) (11, 12) and experiencing spousal bereavement at least before a year. The participants included 163bereavedwomen (54.7%) and men (45.3%). The age of the total sample ranged from 65 to 96 years (mean age: 78.73 years±7.07years).

Assessment tools

Socio-demographic Information Form: It was developed to obtain information about various demographic features and religiousness level of the participants as well as details concerning their bereavement (e.g., cause of death and time since the loss).

Multidimensional Scale of Perceived Social Support: This scale evaluates social support by family members (SFAM), friends (SF), and significant others (SSO)(13). It consists of 12 items on a 7-point scale (1=strongly disagree; 7=strongly agree). Eker and Arkar adapted the scale for Turkish respondents; the total score ranges from 7 to 84, and higher scores indicated more perceived social support (14). In the present study, Cronbach's alpha was 0.92, 0.85, 0.90, and0.84 for SFAM, SF, SSO, and overall, respectively.

Rosenberg Self-Esteem Scale: This is a self-report measure consisting of ten items that evaluate an individuals' self-esteem on a 4-point scale (1=strongly agree; 4=strongly disagree). The total score ranges from 10 to 40, and a high score indicates high self-esteem. In relation to both Turkish validity and reliability studies of the scale and the present study, Cronbach's alpha was found 0.75 (15).

Religious Coping Scale (RCOPE):): The RCOPE consists of 14 items that assess employing PRCOPE and NRCOPE (8). It is a self-report measure on a 4-point scale (1=not at all; 4=a great deal). High scores indicate a higher level of employing a particular religious coping style. The Turkish version of the scale has been used as a reliable and valid scale in the literature (16). In the present study, Cronbach's alpha was 0.82, 0.77, and 0.82 for PRCOPE, NRCOPE, and total religios coping, respectively.

Geriatric Depression Scale: It is a self-report measure used to identify the depression in elderly and consists of 30 items wherein respondents are required to answer Yes/No (17). The total score ranges from 1 to 30, and scores that are higher than14 denote depression. In validity and reliability studies for Turkish population, Cronbach's alpha was found 0.92 (18). In this study, it was 0.86 for the scale.

Post-traumatic Growth Inventory (PTGI): The PTGI assesses positive changes perceived as a result of coping with trauma. It is a self-report measure that consists of 21 items on a 6-point scale (0=I did not experience this change as a result of my crisis; 5=I experienced this change to a very great degree) (4). Unlike the original, Turkish psychometric studies revealed three subdimensions; namely, changes in SP, RWO, and PL, with Cronbach's alpha values0.88,

0.86, and 0.87, respectively, and 0.94 for total PTG (19). In the present study, Cronbach's alpha was 0.76, 0.68, 0.80, and 0.85 for changes in SP, RWO, PL, and overall PTG, respectively.

Procedure

The participants completed the Socio-demographic Information Form and the six scales. Before administration, approval from the nursing homes and ethical approval from Dokuz Eylül University Ethical Committee of the Faculty of Arts were obtained. The researchers informed the participants about the aim and procedures of the study, and informed consent was obtained from all the participants. First, the researchers administered SMMT and evaluated the prospective participants' cognitive assessment. Individuals who scored lower than 23, had married someone else after their bereavement, diagnosed for any psychiatric diagnosis, or used psychiatric medicine were excluded. Participants who had been married and experienced spousal bereavement more than once were asked to consider the last bereavement when answering the questions.

Statistical analysis

Data obtained from the participants were analyzed by using the SPSS 16. An independent sample t-test and multivariate analyses of variance (MANOVA) were conducted to examine gender differences in PTG, social support, RCOPE, and self-esteem. Pearson Correlation analyses were conducted to evaluate correlations between the variables, and hierarchical regression analyses were conducted to determine predictors of PTG and subdimensions.

RESULTS

Characteristics of marital relationship and the loss

Participants were asked to provide information related both to characteristics of their marital relationship (duration, satisfaction with marriage) and their spousal loss (cause of death, time since the loss). The mean marriage duration was 33.33±16.11 years. The mean value of participants' marriage satisfaction (determined by asking how satisfied they were with their marriage on 5-point scale) was 3.97±1.30. Causes of death were disease lasting more than three months (53.4%), acute illness (36%), accident (8.7%), murder (1.2%), and natural disaster (0.6%). The mean of time since the loss was 19.3±13.28 years.

Correlations between variables

Pearson correlations were calculated to evaluate correlations between the variables. The results indicated that total PTG was negatively related with gender (1=female, 2=male), whereas it was positively related with SFAM, SF, and SSO; total RCOPE; and PRCOPE and NRCOPE. SP was negatively related with gender whereas positively related with years of living in nursing homes, RCOPE, PRCOPE, and NRCOPE. RWO was negatively related with gender whereas positively related with total health problems (a sum of all of their health problems); total perceived social support, SF, SSO; and RCOPE, PRCOPE, and NRCOPE.PL was negatively related with gender, satisfaction with marriage (determined by asking how satisfied they were with their marriage on a 5-point scale), and depression. On the contrary, it was positively related with health perception (determined by asking how they assess their own health on a 5-point scale), total perceived social support, SSO, RCOPE, PRCOPE, and self-esteem.

Post-traumatic growth level of the sample and gender differences on the measures of the study

Prior to the analyses, the data were screened to evaluate whether they confirmed the assumptions, at which point two cases identified as multivariate outliers were deleted. Analyses were carried out with the remaining 161 cases.

The participants' total mean PTGI score was 75.68±13.93, and the mean scores for PTGI factors, namely, changes in SP, RWO, and PL were 5.83±6.21,

24±5.54, and 15.83±5.53, respectively. Independent sample t-tests were conducted in order to determine the difference between women's and men's PTG levels, and widows (M=79.44, SD=12.48) reported significantly more growth than widowers (M=71.15, SD=14.31) for total PTG [t(159)=3.92, p<.001]. MANOVA was conducted to determine gender differences on the subdimensions of PTG, and the results revealed a significant main effect of gender [Wilks' Λ=.91, F(3, 157)=5.32, p=.002, ηp^2=.09]. A Bonferroni correction was conducted to assess the significance of univariate analyses and alpha values lower than.016 (i.e.,.05/3) were accepted as significant. After this correction, a significant main effect of gender was observed for SP [F(3,157)=12.74, p<.001], RWO [F(3,157)=9.94, p=0.002], and PL [F(3,157)=6.59, p=0.011]. The results indicated that widows reported higher levels of SP (M=37.375, SE=0.639; M=33.986, SE=0.702), RWO (M=25.227, SE=0.575; M=22.534, SE=0.631), and PL (M=16.841, SE=0.58; M=14.630, SE=0.637) than widowers.

MANOVA was used to determine the effect of gender differences on the social support and religious coping. The results showed that the main effect of gender on social support was significant [Wilks' Λ=.94, F(3, 157)=3.35, p=.002, ηp^2=.06].A Bonferroni correction was conducted, and alpha values lower than.016 (i.e.,.05/3) were accepted as significant. Regarding this correction, a significant main effect of gender was observed only for SFAM [F(1, 159)=5.61, p=.01, ηp^2=.03). The results indicated that women (M=21.045, SE=0.893) reported higher levels of family support than men (M=17.904, SE=0.981).Regarding gender differences in religious coping, because the test of equality of covariance matrices was found to be statistically significant, Pillai's Trace was used instead of Wilks' Lambda. The results showed that main effect of gender was significant [Pillai's Trace=.06, F(2,158)=5.84, p=.004, ηp^2=.06]. A Bonferroni correction was conducted, and alpha values lower than.025 (i.e.,.05/2) were accepted as significant. Regarding this correction, a significant main effect of gender was observed only for PRCOPE [F(1,159)=5.61, p=.03, ηp^2=.02]. According to these results, women (M=25.136, SE=0.421) reported higher levels of using positive religious coping than men did (M=23.822, SE=0.462). Additionally, independent sample t-test was used to examine gender differences in relation to self-esteem. However, no significant difference was found between widows and widowers [t(159)=1.81, p=.07].

Predictors of Total PTG

Four hierarchical regression analyses using the same set of independent variables were conducted in order to determine predictors of PTG and its subdimensions. In the first step, gender (1=female, 2=male), age, years of education, satisfaction with nursing home, years of living in a nursing home, and depression were entered into the regression analyses, and then the personal resources PRCOPE and NRCOPE, self-esteem, and SFAM, SF, and SSO were entered in the second step. Mean and standard deviation values of these variables are presented in Table 1.

The hierarchical regression analysis revealed that 12% variance explained by the first step was significant (F(6,154)=3.62, p=0.002, R2=.20), and gender contributed significantly to the regression model(t=-3.90, p<.001). Entering the personal resource variables explained an additional 20% of variation in growth, and this change in R^2 was significant, (F(6,148)=7.27, p<0.001).All the variables explained 32% of the variance [F(12,160)=5.89, p<0.001].In the final model, PRCOPE (t=3.60, p<.001, r=0.28); NRCOPE (t=2.05, p<.01, r=0.17); SF (t=2.20, p<.05, r=0.18); and SSO (t=2.30, p<.05, r=0.19) were positively correlated, and gender (t=-3.36, p=.001, r=-0.27) was negatively related with total PTG. In other words, PTG is enhanced if one uses religious coping and receives support from family and significant others. Furthermore, being a woman appears to be associated with a greater PTG level.

Table 1. Descriptive statistics of predictors.

Variable	Mean	sd	Min-Max
Gender*			
Age (year)	78.73	7.07	65-96
Education (year)	5.08	3.71	0-17
Satisfaction with nursing home	3.90	1.05	1-5
Living nursing home (year)	5.55	4.91	0.08-20
Depression	12.70	6.27	0-29
PRCOPE	24.54	3.99	7-28
NRCOPE	13.65	4.75	7-27
Self-esteem	28.01	4.05	18-40
SFAM	19.62	8.49	4-28
SF	15.97	6.95	4-28
SSO	17.96	7.65	4-28

*1=female, 2=male

Predictors of changes in SP

The results showed that at the first step, gender (t=-3.48, p=.001) and the length of living in nursing home (t=2.43, p=.02) contributed significantly to the model and accounted for 13% of the variance (F(6,154)=3.96, p=0.001). The second step explained an additional 14% of the variation in SP, and this change in R^2 was significant, F(6,148)=4.80, p<0.001.All the variables explained 27% of the variance [F(12,160)=4.70, p<0.001]. In the final model, PRCOPE (t=4.03, p<.001, r=0.31) and years of living in nursing homes (t=2.45, p=.01, r=0.19) were positively related whereas gender (t=-2.80, p=.01, r=-0.22) was negatively related to changes in SP.

Predictors of changes in RWO

The first step revealed that gender (t=-3.01, p=.002) contributed significantly to the model and accounted for 9% of the variance (F(6,154)=2.54, p<0.02). Entering the personal resource variables explained an additional 20% of variation in growth, and this change in R^2 was significant, F(6,148)=6.90, p<0.001. All the variables explained 29% of the variance [F(12,160)=5.02, p<0.001]. In the final model, SF (t=3.79, p<.001, r=0.29) and SSO (t=2.05, p=.04, r=0.17) were positively related with RWO, whereas gender (t=-3.25, p=.001, r=-0.26) was negatively related.

Predictors of changes in PL

The results of the first step showed that gender (t=-2.72, p=.01) and depression (t=-2.37, p=.02) contributed significantly to the model and accounted for 11% of the variance (F(6,154)=3.28, p<.05). The second step explained an additional 13% of the variation in PL, and this change in R^2 was significant (F(6,148)=4.26, p=.001). All the variables explained 24% of the variance [F(12,160)=3.98, p<.001]. In the final model, SSO (t=2.69, p=.01,

Table 2. Predictors of total ptg and three subdimensions.

Final model: Predictors	PTG (total)		SP		RWO		PL	
	β	t	β	t	β	t	β	t
Gender	-.30	-3.36***	-.22	-2.80**	-.25	-3.25*	-.14	-1.80
Age	-.05	-.71	-.04	-.60	-.03	-.37	-.05	-.70
Education (year)	-.10	-.10	-.10	-1.22	-.15	-1.81	.10	.81
Satisfaction of nursing home	.05	.63	-.00	-.03	.04	.60	.10	.10
Living nursing home (year)	.04	.63	.18	2.45**	-.04	-.61	-.04	-.60
Depression	-.15	-1.67	-.14	-1.51	-.03	-.40	-.20	-1.96
PRCOPE	.27	3.60***	.32	4.03***	.14	1.80	.19	2.39*
NRCOPE	.16	2.05**	.09	1.14	.20	1.91	.15	1.77
Self-esteem	.00	.04	.04	.41	-.10	-.90	.05	.53
SFAM	.04	.51	.00	.04	-.00	-.04	.09	1.22
SF	.20	2.20*	.13	1.64	.30	3.79***	-.02	-.30
SSO	.20	2.30*	.10	.74	.20	2.05*	.22	2.69*
F change	7.27***		4.80***		6.90***		4.26*	
R2	.20		.14		.20		.13	

***p<.001, **p<.01, *p<.0

r=0.29) and PRCOPE (t=2.39, p=.02, r=0.29) were positively related to PL. Table 2 summarizes the results of hierarchical regression analyses.

DISCUSSION

This is the first comprehensive study examining the relationships among personal and social resources related to PTG in bereaved elderly in Turkey. The first aim of this study was to assess levels of PTG in the elderly. The total scores of PTG obtained from the current sample revealed that the bereaved elderly experienced a moderately high level of growth relative to other samples (19). This finding may be related to the particular sample of elderly individuals and to the nature of their life crisis. Loss of a spouse may remind the elderly of their own mortality; their thoughts may include, "Life will end and being alive is invaluable. "Bereaved individuals may experience a sense that they should reconsider their priorities in life. A life-long partnership interrupted by an inevitable life event such as death may result in individuals feeling stronger because of facing struggles alone; accordingly, this may enhance the experience of growth. Results revealed that the years of living in a nursing home were only associated with changes in SP. Accordingly, the more years spent in a nursing home, the greater one's SP. After the death of a spouse, individuals may have had to adaptor the nursing home environment and realized that they could carry on with life without a spouse. Furthermore, the results revealed that women reported significantly more growth than men for overall PTG and the three subdimensions. Additionally, being a woman was a PTG predictor. This finding may be related to different aspects of marriage. Marriage has its own social, emotional, and instrumental aspects for both genders. Generally, a man appears to perceive his wife as the primary resource of emotional support (10, 20). Because men depend on women for many vital tasks in our culture, women may adapt to living alone easily after conjugal loss.

The findings indicated that the relationship between total PTG and PRCOPE (r=0.33, p<0.01) was stronger than that between PTG and NRCOPE (r=0.19, p<0.05). The MANOVA results suggest that widows have a higher tendency to use PRCOPE, which might explain why women reported higher levels of growth than men. Additionally, it was found that both types of RCOPE were predictors of PT. It is suggested that a life crisis such as spousal bereavement may damage people's assumptions and schemas, thereby resulting into efforts to find meaning in the loss with difficult feelings (3). Spiritual and/or religious beliefs have a major impact on finding meaning in the loss of loved ones. Using RCOPE in the face of "life-altering events," regardless of the "negative," can lead to changing perspective about the world after spiritual questioning; thus, the loss may be described as "part of the plan of God" by the individual and may result in a deeper spiritual understanding (8,21,22). A bereaved elderly may accept this situation and change personally and spiritually. Through the existential struggle after the loss and through the process of sense-making, bereaved people may experience growth regardless of their type of RCOPE and believe that life is a one-time chance.

Social support is another important resource for PTG (23). Although total perceived social support was correlated positively with total PTG, regression analysis revealed that it was not a PTG predictor. When examined in more detail, it was found to be noteworthy that SF and SSO predicted PTG. Support from friends may be more beneficial than family support for the emotional problems experienced by the person who has lost a spouse (24). The results also showed that women tended to perceive more support from their families. This can be explained by a greater tendency of women to build intimate relations with family members and friends, whereas men tend to receive support from their spouses for a range of social relationships. Moreover, older women are more likely than men to gain benefits from social networks (5). Furthermore, in Turkish

society, support from family may be perceived as something ordinary. In essence, perceived social support by the elderly appears important with regard to positive changes after the loss and to promoting emotional well-being.

Self-esteem was positively correlated with only changes in PL. On the contrary, regression analyses showed that self-esteem was not a PTG predictor. This finding is not in accordance with studies that have found that high self-esteem is related to PTG (7). Skills deficiencies are more prominent for those who have been married for many years, thus rendering the process of loss even more difficult. Self-esteem is an important characteristic for adjusting to changes and gaining new skills after a loss (25). However, the convenience of living in a nursing home may compensate for such shortcomings in bereaved older individuals. Thus, for elderly widows/widowers living in nursing homes, other resources may be more beneficial for one's perspective of life after the loss.

Although the findings of this study have contributed to existing literature, it has several limitations such as the utilization of a cross-sectional design, self-report scales, and a sample of participants living in nursing homes. Finally, as a clinical implication, interventions should focus on increasing social support resources and coping strategies to foster PTG. Moreover, supporting older adults in skills that transcend gender role boundaries would be beneficial for preventive health policy.

Conflicts of interest

The authors have no conflicts of interest to declare.

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