DOES SOCIAL SUPPORT MODERATE THE RELATIONSHIP BETWEEN TRAUMA AND THE QUALITY OF LIFE OF OLDER ADULTS?

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Abstract. The issue regarding improving one's wellbeing and quality of life represents a special challenge for the assisted resilience practices targeting the older adult population. Thus, the present study had the main objective of identifying the type of relationship between having gone through traumatic events and one's quality of life when looking at older adults aged 65 and over. A second objective was to investigate to whether or not social support is moderating this relationship. The participants (*N*=115) were selected from the patients admitted to the "Ana Aslan" National Institute of Gerontology and Geriatrics during the study period and were asked to fill out the Traumatic Experiences Evaluation Inventory, the Quality of Life Scale (WHOQOL-AGE) and the Multidimensional Scale of Perceived Social Support (MSPSS). The regression results showed that one's traumatic experiences are significantly and negatively predicting one's quality of life levels. Social support was not found to be a significant variable, however, the findings have shown that very low and very high levels of social support significantly and negatively influenced the relationship between traumatic experiences and quality of life. As a result, traumatic experiences are a significant predictor of quality of life, and this relationship has a tendency towards worsening at the two extreme levels of perceived social support. Future research will benefit both from testing the mechanisms underlying these results and from investigating what other resilience factors could be responsible for the relationship between traumatic experiences and quality of life.
Key words: quality of life, traumatic experiences, social support, older adults

Rezumat. Problematica creșterii bunăstării și a calității vieții în contextul populației vârstnice cu istoric traumatic este o provocare specială pentru reziliența asistată. Obiectivul acestui studiu a fost acela de a identifica tipul de relație existentă între evenimentele traumatice și calitatea vieții, la persoanele de peste 65 de ani, cât și dacă această relație este moderată de suportul social. Participanții (*N*=115) au fost selectați dintre pacienții internați în perioada efectuării studiului la Institutul Național de Gerontologie și Geriatrie „Ana Aslan" și au fost rugați să completeze Inventarul pentru Evaluarea Experiențelor Traumatice, Scala de Calitate a Vieții (WHOQOL-AGE) și Scala Multidimensională a Suportului Social Perceput (MSPSS). Rezultatele obținute din analiza de regresie au arătat că experiențele traumatice prezic în mod semnificativ și negativ calitatea vieții. Suportul social nu a moderat semnificativ relația dintre parcurgerea experiențelor adverse de pierdere și calitatea vieții. Cu toate acestea, rezultatele au arătat faptul că atât la niveluri foarte scăzute, cât și la niveluri foarte ridicate ale suportului social există un efect moderator semnificativ și negativ. Drept urmare, experiențele traumatice sunt un predictor semnificativ al calității vieții, iar această relație tinde să se înrăutățească la nivelurile extreme ale suportului social. Studiile viitoare ar beneficia din a testa motivul pentru care aceste rezultate apar, cât și din a investiga ce alți factori de reziliență ar putea explica relația dintre experiențele traumatice și calitatea vieții.
Cuvinte cheie: calitatea vieții, evenimente traumatice, suport social, persoane vârstnice

INTRODUCTION

When talking about the ageing process, all the transformations and progressive losses that occur with growing old are the ones that come to mind. In this process, people start to experience a wide range of negative, uncontrollable and mostly irrevocable changes, such as reductions in functional capacities, in memory, in income, in social relations due to

retirement, as well as the loss of one's professional status, the occurrence of certain age-related diseases that reduce the ability to function normally as well as losing loved ones. In this context, one's resources have to be allocated to managing the losses and to constantly adapting to the new circumstances. The adaptive coping mechanisms must be stimulated and strengthened.

While one's social support and quality of life have benefited from increased attention in the extant literature on the psychological issues of older adults, the results cannot easily be extrapolated to all populations. This is because social relations are highly dependant on the cultural context and structure of a given society [1]. Therefore, the aim of present study is to investigate the relationship between past traumatic experiences and the quality of life of Romanian older adults aged 65 and over, while also testing for the potential moderating effect of social support on this relationship.

Given the theorising of Hobfoll and Ionescu [2], there are two resources that researchers should consider when looking at older adults: a strong feeling of self-efficacy and a high quality social support system. The former refers to the internal resources of having an optimistic attitude towards one's existence and a positive perspective of the future and of the opportunities to grow regardless of one's age. The latter regards the external resources of having both an emotional and material support from others as well as a feeling of belonging to a group. These resources work interdependently and are very useful for an effective adaptation in the face of adversity.

One's social capital with all its components (i.e., trust, feeling of belongingness and social participation) as well as the social support (with its emotional, instrumental and informal dimensions) have a direct effect on one's health [3]. Moreover, these are as important as one's physical health in preventing psychological stress, in disease prevention and health promotion. The loss of the optimal functionality of various organs, and the reduction or loss of certain senses such as vision and hearing lead to social isolation. Therefore, these deficiencies become an added stress factor which decreases the received social support while increasing the older adults' loneliness and psychologicalo stress [4].

As a result, both the lack of social support and the somatic health issues must be approached when promoting mental health among the older adults, because both of these factors are important risk factors of psychological distress. Physical deficiencies contribute to a reduction in social support to a higher extent than one's diagnosis which is why this is an issue pertaining to the societal interest [4]. Social interactions can not only stop the functional decline, but they can also help in recovering some of the lost functions. For example, strong social networks and social support have been shown to be connected to improvements in cognitive function. Moreover, those who reported strong social networks are also evaluated to have a lower mortality and morbidity risk [5]. Thus, when looking at older adults, it is important to ensure a good maintainance of one's levels of physical and psychological activities, of one's functional integrity as well as a consolidation of one's received social support, which is also due to the relationship between one's functional health and one's quality of life.

A favorable exchange with the proximal social environment has positive effects on one's mintal health and wellbeing when this support is high in quality and adapted to one's needs [6]. In older age, a good quality of life and wellebing are defined through the positive perceptions of a good health and functional ability, of the feeling of personal adequacy and utility, of social participation, of good family relations, of the availability of friends and of the received social and economic support. For

example, Zaninotto et al. [as cited in 7], conducted a study on 11.392 older adults aged 65 and over and found that a small number of friends and a lowly perceived social support predicted lower levels of quality of life. The study highlighted the important influence of four factors: health, socio-economical circumstances, psycho-social circumstances and demographic characteristics. The negative predictors were: the limitations imposed by long-term illnesses, the presence of depression, any functional limitations, a lack of mobility and the difficulty in completing daily activities. The socio-economic predictors with a positive influence were: having access to a car, higher income, owning the place they live in, higher educational levels. The positive psychosocial predictors were: the size of one's social network, having trusting relationships with one's family and friends and having a higher number of friends. Thus, an increase in resilience and a decrease in depression could be estimated to have the same levels of success in increasing the quality of life as it would be the case with the reduction of physical disabilities, which makes these variables noteworthy for all medical specialties [7].

An important challenge to increasing the wellbeing and quality of life of older adults is posed by the potential history of traumatic events. In his papers, Dr. Peter A. Levine spoke about trauma over time, about the experiences of people who have been haunted by memories that filled them with fear and horror, with anger, hatred and vengefulness and with the overbearing feeling of having suffered a loss beyond repair [8]. According to DSM-5, trauma and stress related disorders include among others, the reactive attachment disorder, the uninhibited social behaviour disorder, the post-traumatic stress disorder (PTSD), and adaptive disorders [9]. The psychological stress resulting from being exposed to a stressful and/or traumatic event varies from person to person and in some cases, the symptoms can be explained by the context that is eliciting fear or anxiety. These symptoms are the varied expressions of the psychological suffering caused by having gone through catastrophic events [9]. The concept of psychological trauma refers to an event that people cannot make sense of by using their existing psychological capacities, and even normal stress reactions aimed to help in facing adversities become dangerous in the context of a traumatic situation [10].

In conclusion, the quality of life for older adults is characterised by sudden deteriorations, while the individual differences responsible for adapting to the new circumstances are substantial and they are not yet fully understood [11]. Social orientation and involvement can provide further explanations that can go beyond the usual considerations of the health predictors [12]. This is because it has been shown that an active social life during old age is associated with a better wellbeing, with a less steep end-of-life decline and with a delayed onset of terminal decline [11]. For example, older adults that are involved in useful activities (e.g., volunteering, gardening, house chores, social activities) have a higher likelihood to be happy, to function well physically and cognitively, to live longer [13], to show fewer signs of depression [14] and more signs of positive affect [15]. An important role in developing a strong resilience is also played by previous traumatic experiences. The present study will thus attempt to integrate the variables of traumatic experiences, quality of life and social support in a model that might explain the mechanims underlying the previous findings. The first objective is to test whether having gone through any traumatic experiences in the past 5 years can predict older adults' quality of life, while the second objective is to investigate whether social support moderates this relationship. Based on previous research, it can be expected that (i) past traumatic experiences can significantly predict

quality of life (H1) and that (ii) social support is a significant moderator of this relationship (H2).

METHODS

Participants

The study included 115 patients aged between 65 and 94 (*M* = 73.87, *SD* = 6.84; 80 females) admitted to the Central Headquarters of the "Ana Aslan" National Institute of Gerontology and Geriatrics. Based on educational level, participants were distributed as follows: 36% completed 8 years of education, 17% completed 10 years, 27% finished high school and 20% had reported having an upper level education. Those participants who were diagnosed with a severe mental illness or with psychotic elements, with neurocognitive disorders, with severe sensitive deficits or who had a lack of discernment and/or who reported using substances were excluded from the study.

Data collection took place between March and April 2019 through Google Forms. Participants could fill in the questionnaires either on their own or with the help of the researcher. Informed consent was provided before the study commenced. All participants who started the study completed it in full, no particular incidents were reported and no reward was offered for participation. Ethical approval was offered by the Institute's Ethics Committee.

Measures

- ***Quality of life***

In order to measure participants' quality of life the WHOQOL-AGE questionnaire developed by World Health Organisation (WHO) was used. This instrument was adapted for older adults, and it is the shortest questionnaire aut of the QOLs developed by WHO. It consists of 13 positive items, out of which 8 were derived from EUROHIS-QOL and 5 from WHOQOL-OLD [16].

- ***Social support***

The Multidimensional Scale of Perceived Social Support (MSPSS) is a brief research instrument developed to measure participants' perceived social support from 3 sources: family, friends and other significant people. The scale has 12 items grouped in 3 factors: support received from close ones ("There is a special someone next to me when I need one.", " There is someone I can share my joys and sorrows with."), from one's family ("My family is really trying to help me.", "I receive emotional support and help from my family.") and from one's friends ("My friends are really trying to help me.", "I can count on my friends when things don't work out the way they should."). Each item was scored on a 7-point Likert scale (where 1 = strongly disagree, 7 = strongly agree). The scale showed good levels of reliability with a Cronbach's α of .88 [17].

- ***Traumatic experiences***

The traumatic experiences evaluation inventory was used. This is an experimental questionnaire in process of development and it is part of a larger investigation on the effects of traumatic or stressful events on people. In this investigation, the inventory was administered in combination with other scales. The inventory consists of 18 items, but for the present research only the items pertaining to older adults were used. Examples of traumatic experiences are: losing one's partner, losing any other loved one, accidents, terminal illness, physical and/or psychological abuse, calamities, losing significant possessions, and others.

Procedure

The selected participants were first briefed on the purposes of the study, without giving away the hypotheses. No deception was necessary. Then, they were asked to sign a consent form after which the study started. The questionnaires they filled out were given in the order of traumatic experiences inventory, MSPSS and WHOQOL-AGE. One session lasted approximately 45 minutes.

Design and analysis

The demographic variables of age (i.e., continuous), gender (i.e., categorical) and marital status (i.e., categorical) were

collected in order to be included in the analyses as confounding variables. The outcome variable was the participants' quality of life ratings, which was a continuous variable. The traumatic events (in the 5 years prior to the study) and the social support, both continuous variables, were treated as predictors, with the social support variable being included as a moderator variable as well. A correlational design was used, and regression models were run tot test the hypotheses. The PROCESS 3.0 extension [18] will be used to test for the moderating effect of social support.

RESULTS

Table I depicts both the descriptive statistics for the variables included in the study, and the zero-order correlations between them.

Tab. I Descriptive statistics and zero-order correlations

	M	*SD*	TExp	QoL	Support	SC	Fam	Fr
TExp	1.39	0.79	-					
QoL	50.11	7.85	-.41***	-				
Support	74.87	15.62	.01	.30**	-			
SC	25.85	3.40	-.11	.31**	.47***	-		
Fam	27.92	11.13	.13	.17	.78***	.22*	-	
Fr	21.10	8.26	-.11	.21*	.62***	.19*	.07	-

Notes. *p < .01; **p < .01; ***p < .001

TExp – traumatic experiences, QoL – quality of life, Support – social support, SC – support from close ones, Fam – family support, Fr – friends' support

The regression model including traumatic experiences as a predictor and quality of life as the outcome was staistically significant ($F(3,111) = 7.56$, $p < .001$), explaining 17% of the variance in quality of life. There is a significant and positive relationship between past traumatic experiences and quality of life (β=0.41, $p < .001$) which supports the first hypothesis of the study.

The model including the moderator showed that both past traumatic experiences ($\beta = -3.96$, $t = -3.64$, $p < .001$) and social support ($\beta = 0.14$, $t = 3.40$, $p < .001$) significantly predict quality of life. This means that the more traumatic experiences one's had and the less social support one's received, the poorer one's quality of life will be. Social support was not found to significantly moderate the relationship between the past traumatic experiences and quality of life ($\beta = 0.05$, $t = 1.28$, $p > .050$). Therefore, the second hypothesis of the study was disconfirmed.

Tab. II Percentage of responses to the MSPSS questionnaire

MSPSS Items	Min.	Max.
There is a special one near me when I need support.	0,8	82,6%
There is a special person that I can share my joys and sorrows with.	0,8	79,1%
My family is really trying to help me.	0	68,6%
I receive the emotional help and support I need from my family.	0	60,8%
In my life there is a special person that is a true source of relief for me.	0,8	71,3%
My friends are really trying to help me.	1,7	18,2%
I can count on my friends when things get rough.	6%	(20 %
I can talk to my family about my problems.	0,8	71,3%
I have friends with whom I can share my joys and sorrows.	4,3%	21,7%
There is a special one in my life who cares about my feelings.	0.8	58,2%
My family is willing to help me make decisions.	0,8	65,2%
I can talk with my friends about my problems.	6,9%	15,6%

Notes. 0% = no response, 0.8% = 1 response, 1.7% = 2 responses, 4.3% = 5 responses, 6% = 7 responses, 6.9% = 8 responses.

Table II depicts the percentage of responses for each MSPSS question, while Table III shows the distribution of traumatic experiences in the sample divided by gender. The maximum values for the participants' level of satisfaction with their quality of life were recorded as follows: 80.8% for the overall evaluation considering the 2-week prior period; 80.8% for the self-evaluation; 76.5% for the evaluation of one's capability to complete daily activities; 84.3% when evaluating personal relationships; 98% for the evaluation of satisfaction with the living conditions; 76.5% for the control over desired things; 70.4% for financial satisfaction; 49% for intimate relations.

Tab. III Number of traumatic experiences per gender

	0	1	2	3	4	Total
Men	3	29	3	0	0	35
Women	4	40	22	12	1	79
Total	7	69	25	12	1	114

The analysis further shows that at very low levels of social support (β = -4.72, t = -3.67, p < .001), as well as at very high levels (β = -3.20, t = -2.67, p < .010), social support significantly influences the relationship between traumatic experiences and quality of life. This shows that social support has deterring effects on the already negative effects of past traumatic experiences and quality of life, indicating that too little, but also too much social support can be maladaptive.

DISCUSSIONS AND CONCLUSIONS

The aim of the present research was to investigate the relationship between the traumatic experiences from the past 5 years and participants' quality of life in a sample of older adults aged 65 years and over. The first hypothesis of the study depicting a significant relationship between traumatic experiences and quality of life was supported by the results. The first regression model showed a positive relatinship between the variables, while the model that included the moderator resulted in a negative relationship between traumatic experiences and quality of life (as expected). It remains unclear why this difference occured. The second hypothesis of the study was not supported by the findings, as social support was not found to significantly moderate the relationship between the key variables of the study. However, very low and very high levels of social support have been found to negatively influence the relationship between traumatic experiences and quality of life.

The results of the study are raising different issues. First, important factors for resilience other than social support can be investigated in future research, while a special focus can be given to furthering the understanding of the already included variables. Second, a different statistical moderation or even mediation model can be used to understand the mechanisms underlying the found relationships. Moreover, looking at these relationships longitudinally is a worthwhile effort, given the temporal difference between past trauma and present quality of life. Instruments tailored to better identify the factors are needed, given that complex factors, that are specific to one's condition and/or illness significantly impact the post-trauma quality of life [19]. Such factors can be: one's physical and emotional wellbeing, one's functional involvement, the recovery/resilience process, the peri-traumatic experience [19]. One's self-esteem, financial resources, cognitive capacities and so on can be added to the list. Therefore, the resources aiding in obtaining a good level of resilience are numerous and can be individual or

environmental, elementary or composed, distal or proximal [2].

Third, it is interesting that social support overall was not found to moderate the link between past traumatic experiences and quality of life in a statistically significant way, but at its extremes it was found to be an influencing and negative factor. It is true that the majority of the existing studies on the role that social support plays in human resilience processes are correlational and, therefore, there is no possibility for causal inference indicating that social support is either a protective or a risk factor. Furthermore, these findings cannot indicate whether trauma survivors are simply better at developping and maintaining an increased social functioning [20].

However, the results of the present paper can be explained by the scientific literature. Social support does not represent a universal and unequivocal type of support, therefore its effectiveness can vary significantly by the circumstances during which that support is received, as well as its quality. For example, when looking at traumatic stress, the effectiveness of the social support is highly dependant on the links between its source, its kind and the time when it is offered on one hand, and the needs of the individual as well as their or the system's level of development on the other [21]. As a result, offering social support at a time when it is not in line with the needs of the individual will not be effective or perceived as helpful [21]. In fact, social support can be counterproductive and/or maladaptive especially if it is unsolicited, excessive or misaligned to one's needs [22]. Almedom [23] found that cognitive support is perceived as most helpful when the individual is ready to receive it and actually asks for it, but not when it was unsolicited. Thus, designing a study with all these aspects in mind and with instruments better aimed at measuring the objective effectiveness of the received social support can yeild a better understanding of the interesting effects found in the present paper.

This study does not however come without limitations. First, it is unclear why the first statistical model has shown a positive relationship between traumatic experiences and quality of life, relationship that changes in its value sign in the moderating analyses. This can be caused by a methodological flaw that was not found, therefore the results should be interpreted with ease. Second, the study has a correlational design, therefore causation cannot be implied. Third, it is possible that the lack of statistical significance of the moderating effect of social support stems from a lack of power, as the sample size was likely not sufficient for finding an interaction effect.

In conclusion, when considering the psychological health of older adults aged 65 years and over, it is important to investigate the consequences that traumatic life events have on their perceived quality of life. This study has shown a negative relationship between traumatic experiences and quality of life, and a positive one between the received social support and one's quality of life. However, a moderating effect of social support was not found. Interestingly, at very low and at very high levels of social support, a moderating and negative effect was indeed found. This can be explained by the fact that sometimes too much social support can have deterring effects if it is unsolicited or misaligned to the needs of the receiver. It is true that the present study came with limitations, and so, future research can benefit by aiming to replicate the present results and also, by looking at other resilience factors as well. This should be done in the hopes of disentangling the underlying mechanisms that either protect or place at risk the trauma survivor's quality of life.

Conflicts of interest

The authors declare no conflicts of interest.

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