The relationship between social support and posttraumatic growth in the context of loss of a loved one due to death in a German and Turkish sample

Utrecht University

Faculty of Social and Behavioral Sciences

Department of Clinical Psychology

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by Annika Reuß

Student number: 6860524

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Abstract

The aim of this study was to investigate the relationship between social support and posttraumatic growth (PTG) after bereavement in different cultures, focusing on the cultural dimension individualism-collectivism. 281 participants from Germany, representing individualistic countries, and Turkey, representing collectivistic countries, completed the short-form of the Post Traumatic Growth Inventory and the Social Support Inventory. It was expected that social support is positively associated with PTG. In addition, it was hypothesized that the relationship between social support and PTG is mediated by culture. As expected, results indicated that bereaved, who perceived social support, reported more PTG than bereaved, who perceived less or no social support. Even though results confirmed that bereaved from Turkey perceived social support stronger than bereaved from Germany, results did not confirm that Turkish participants show higher levels of PTG than German participants. Thus, the relationship between social support and PTG was not mediated by the cultural dimension individualism-collectivism. Implications based on these findings were discussed.

Keywords: bereaved, posttraumatic growth, social support, culture, cultural background, individualism, collectivism

Introduction

Bereavement has detrimental effects on health and the grieving process (Stroebe et al., 2007). However, the loss of a loved one due to death goes not only hand in hand with the experiences of negative changes in the life of the bereaved but can also lead to personal growth (Cofini et al., 2014).

Posttraumatic growth (PTG)

Posttraumatic growth (PTG) is characterized by the experience of positive change, for instance, an increased appreciation for life, more meaningful relationships with others, an increased sense of personal strength and changed priorities. These possible positive changes occur as a result of the struggle with highly challenging life crisis, such as the loss of a loved person due to death (Tedeschi & Calhoun, 2004). Thus, bereavement is one area of life in which individuals can demonstrate PTG (Tedeschi & Calhoun, 2004). Tedeschi and Calhoun (2007) even assume that PTG is supposed to be the highest form of change related to grief. Cross-lagged analyses showed that individuals, who experienced moderate levels of anxiety, depression, prolonged grief and PTSD, reported the highest levels of PTG. On the other hand, individuals, who experienced lower or higher symptoms levels, reported in general less PTG (Eisma et al., 2019). Although PTG has been positively associated with emotion and problem-focused coping, PTG is also positively associated with avoidance of painful aspects of the loss and denial (Boals & Schuler, 2019). According to Boelen et al. (2006), the latter is presumably hampering the recovery from bereavement and therefore acute grief reactions are maintained. Thus, it is important to consider that PTG can have both, adaptive and maladaptive effects depending on the given circumstances.

Social support

According to current studies (Prati & Pietrantoni, 2009; Schuettler & Boals, 2011), PTG is encouraged by, inter alia, personal and social resources. The results of the meta-analytic review by Prati and Pietrantoni (2009) support that social support is associated with PTG. Cadell et al. (2003) found, based on cross-sectional data, that social support has, among other factors, a positive relationship with PTG. This result suggests that individuals who receive the greatest level of social support, are more likely to experience personal growth after a traumatic event such as bereavement. On the other hand, individuals who lack social support are unlikely to grow after suffering. Schaefer and Moos's conceptual model (1998), which serves for a better understanding of positive outcomes of life crises and transitions, considers social support even as a key environmental resource. Schaefer and Moos (1998) argue that social support encourages a more favorable appraisal of the event and more effective coping strategies. In addition, the revised model of posttraumatic growth by Tedeschi and Calhoun (2004) includes social support as a predictor of positive change after a traumatic life event, for instance after the loss of a loved person due to death. Supportive friends, family members or other social contacts serve, pursuant to this model, as sources of comfort and offer new schema and coping strategies. Accordingly, the model hypothesizes as well that those individuals who have greater social support will experience more personal growth.

However, further research regarding the specific relationship between social support and PTG is needed to remove still existing ambiguities. For instance, it is still unclear in which specific cases social support is stimulating personal growth after the loss of a loved one, and which kind of social support is the most decisive. These further investigations are important to understand the process of posttraumatic growth after grief.

Culture

Previous research on social support rarely considered culture (Glazer, 2006). Only a few studies regarding social support have considered the impact of culture, mainly by using the cultural dimension of individualism-collectivism (Beehr & Glazer, 2001). Beehr and Glazer (2001) state in their literature review that interpretations and perceptions of social support is affected by culture. McMillen (2004) states further that the fundamental assumptions of individuals, their ability to modify these assumptions after a life crisis and the type of social support they receive are all factors that may be affected by culture.

According to Fiske (2002), culture is a constellation of social constructs such as practices, competencies, schemas, values, norms, goals, institutions and modifications of the physical environment. It is assumed that culture has an impact on individuals (Matsumoto, 2007) and that interactions with other people, for instance close friends, families, teams and religious groups, play a major role in transmitting culture (Brown, 2004; Calhoun et al., 2010). While facing a major traumatic event, such as the loss of a loved one, the rules of the closest social reference group regarding societal narratives and expected views about possible help, coping behavior, and the handling of emotions and their disclosure, are cultural factors that most likely affect individuals' responses to trauma and thus the level of experienced growth (Calhoun et al., 2010).

Broad investigations and comparisons regarding different cultures by focusing on one broad cultural dimension, such as individualism-collectivism, are necessary to understand the role of cultural elements in PTG (Calhoun et al., 2010). Research has found evidence of PTG in populations of various countries, such as South Africa (Peltzer, 2000), Turkey (Powell et al., 2003), Bosnia (Powell et al., 2003), United Kingdom (Snape, 1997) and Australia (Rieck et al., 2005). However, there are only a few studies comparing the level of PTG in different

countries, showing that levels of PTG are higher in collectivistic cultures than in individualistic cultures (Vázquez & Páez, 2011; Wlodarczyk et al., 2016). These cross-national differences may be influenced by the previous described cultural factors (Calhoun et al., 2010).

Cultural factors can also define how individuals see themselves and their relationship with others (Calhoun et al., 2010). A broad distinction that has been applied to describe variations is the characterization of individuals as independent or interdependent. Independent individuals, who define themselves by how they differ from others and prefer individual action (Calhoun et al., 2010), are promoted by individualistic cultures, whereas interdependent individuals, who focus on their relationships with others, prefer collective actions and are sensitive to their potential impact on others (Calhoun et al., 2010), are encouraged by collectivist cultures (Markus & Kitayama, 1991). It can be assumed that individuals, from individualistic and collectivistic countries, most likely also differ in their perceived social support after losing a loved one, which in turn might influence the level of growth that they experience. This assumption regarding the relationship of social support, culture and PTG still needs to be examined.

Aim of this study and hypotheses

The first purpose of this study is to gain further insights on the relationship between social support and PTG after the traumatic event of bereavement. Existing literature provides evidence about social support having a positive relationship with PTG (Cadell et al., 2003). According to the revised model of posttraumatic growth by Tedeschi and Calhoun (2004), social support is a predictor of positive change after a traumatic event. Hence it is hypothesized that (1) social support is positively associated with PTG. Thus, it is expected that bereaved,

who perceive to get social support, show more PTG than bereaved, who perceive to get less social support or none at all (path c', Figure 1).

Moreover, this study aims to examine if there are cultural differences regarding the perceived social support. Goodwin and Plaza (2000) conducted path analytic analyses with a sample of British and Spanish students, whereby the United Kingdom is with a score of 89 out of 100 one of the most individualistic countries and Spain is with a score of 51 out of 100, in comparison to the rest of European countries, a collectivistic country (Hofstede, 2010). It was found that collectivism was predictive of greater levels of family support and higher levels of perceived social support after a stressful event occurred (Goodwin & Plaza, 2000). Another cross-sectional study showed that higher collectivism and social support in bereaved women can lead to a reduction in suicidal ideation, illustrating that collectivistic bereaved may feel less alone because their emotional relationships with group members are likely to play a role in this regard (Ariapooran et al., 2018). According to Ariapooran et al. (2016), social support gives an individual the possibilities to discuss about the traumatic event and potentially enables the individual to reach meaning and identify positive aspects about themselves and life. This is in line with the finding, that collectivism predicts higher levels of perceived social support than individualism (Goodwin & Plaza, 2000). Based on the reported study results by Goodwin and Plaza (2000) and the defined characteristics of individualistic and collectivistic cultures (Triandis, 1993; Calhoun et al., 2010; Hofstede, 2010), it can be assumed that bereaved from collectivistic countries perceive more social support from their social environment, after the loss of a loved one, than bereaved from individualistic countries.

Linked to the previous assumption, the second purpose of this study is, to explore if bereaved from collectivistic countries report more PTG, after the loss of a loved one, than bereaved from individualistic countries (respectively by focusing on Turkey and Germany; path b, Figure 1). Existing studies have suggested that cross-cultural differences regarding

PTG are present. Vázquez and Páez (2011) compared levels of PTG in collectivistic cultures (e.g., Guatemala and Rwanda) and individualistic cultures (e.g., United States and Spain). This comparison showed in general higher scores in collectivistic countries than in individualistic countries. Moreover, another study showed, in a context of natural disasters, that means for PTG were higher in relatively more collectivistic countries (e.g., Columbia and Chile) than in Spain, which is a relatively more individualistic country (Wlodarczyk, et al., 2016).

Thus, it is hypothesized that (2) the relationship between social support and PTG is mediated by culture. It is expected that bereaved from collectivistic countries (e.g., Turkey) perceive social support stronger and therefore also experience higher levels of PTG, as compared to bereaved from individualistic countries (e.g., Germany) who perceive to get less or even no social support at all (Figure 1).
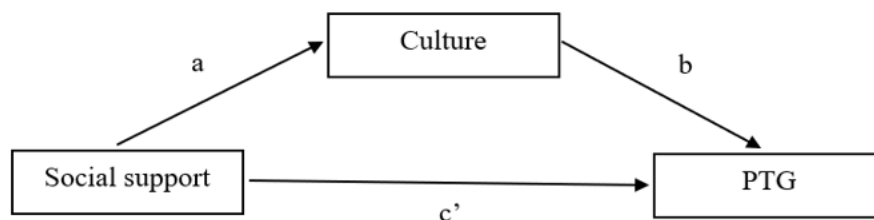

Figur 1. Visual representation of the relationship between perceived social support and PTG, which is mediated by the cultural dimension 'collectivism vs. individualism'.

Method

Procedure

Participants were recruited via e-mail and posts on social media, for instance in grieving groups on Facebook and Instagram. The online questionnaire was implemented by using *Qualtrics* (2020) and was made available for the participants via a link for a period of one-

and-a-half month. First, participants had to confirm that they live in Germany/Turkey, were at least 18 years old, and had lost a loved one in the past three years. Moreover, they had to accept a consent form about anonymity and voluntariness. Participants had the possibility to quit the survey at any time.

The present study project compared a sample of participants from Germany with a sample of participants from Turkey regarding potential differences in their perceived social support and their experience of PTG after the loss of loved one. According to Hofstede (2010), Germany is with a score of 67 out of 100 categorized as a truly individualistic country in which the autonomous individual is the organizing theme (Triandis, 1993). In contrast, in collectivistic countries the community, such as family, religious group, ethnic group and tribe, has the centrality (Triandis, 1993). Hofstede (2010) states that Turkey is with a score of 37 out of 100 a collectivistic country. Thus, Germany and Turkey are representative of individualistic and collectivistic countries.

In order to provide both groups of participants with a questionnaire in their respective language, the original English measurement instruments were first translated by two experts in the field of psychology into German and Turkish language. Afterwards, they backward translated the questionnaires to ensure the correct meaning of each item. By doing such forward and backward translation, the equivalence of the whole questionnaire in the target language was maintained.

Participants

Data were collected from 456 bereaved individuals all of whom have experienced the loss of some significant in the past three years. 237 individuals filled out the German version of the online questionnaire, and 219 individuals participated in the Turkish version. Nevertheless, 21 participants, who were not completing the survey till the end, were excluded.

142 people, who answered the German or Turkish version of the questionnaire, indicated they were not living in the respective country. These participants were excluded from the study as well. And 12 participants were excluded because they had no German nor Turkish nationality.

Therefore, a total sample of 281 participants was examined in this study. These participants consisted of 138 female and 6 male Germans from Germany (N=144), and 111 female and 26 male Turks from Turkey ($N = 137$). In total, 88.6 % of the participants were females ($N = 249$) and 11.4 % were males ($N = 32$).

Regarding level of education, religiousness, age, closeness of the relationship to the decedent and time that passed since the loss, five independent-samples t-tests were performed to determine if there were differences regarding these demographic variables between the two groups. Turkish participants had a statistically significant higher level of education ($M = 3.44$, $SD = .73$) than German participants ($M = 2.82$, $SD = 1.04$). In average, Turkish participants ($M = 7.45$, $SD = 3.06$) were also more religious than German participants ($M = 5.69$, $SD = 3.01$), which was measured by the item "On a scale from 1 to 10, how much do you believe in God or in another higher instance (i.e., karma)?". In addition, German participants were in average significantly older ($M = 3.33$, $SD = 1.41$) than Turkish participants ($M = 1.78$, $SD = 1.24$). Significantly less time had passed since the loss for the German participants ($M = 1.78$, $SD = .85$) than for the Turkish participants ($M = 2.05$, $SD = .83$). Moreover, German participants had in average a closer relationship to the decedents ($M = 9.38$, $SD = 1.28$) than Turkish participants ($M = 8.07$, $SD = 1.90$), which was measured by the item "How would you characterize the relationship to the deceased person on a scale from 1 (not close at all) to 10 (extremely close)?". The demographic characteristics are presented with more details in Table 1.

Table 1

Demographics and background information of the participants

Variables	Germany ($n = 144$)		Turkey ($n = 137$)				
	M	SD	M	SD	t	p	df
Level of education	2.82	1.04	3.44	.73	-5.82	.001	256.89
Religion	5.69	3.01	7.45	3.06	-4.86	.001	279
Age	3.33	1.41	1.78	1.24	9.77	.001	277.39
Relationship to decedents	9.38	1.28	8.07	1.9	6.74	.001	236.68
Time	1.78	.85	2.05	.83	-2.74	.007	279

Regarding the remaining demographic characteristics, four Chi-Square tests were conducted, which revealed following: sex ($p < .001$) and own children ($p < .001$) differed significantly from one group to another. Marital status ($p < .001$) differed also significantly from one group to another, but it needs to be noted that this result might not be valid as two cell frequencies were smaller than 5. The same note applies to the result regarding reasons of death of the decedents ($p = .071$), which showed that there is no significant difference between the two groups. These demographic characteristics are presented with more details in Table 2.

Table 2

Demographics and background information of the participants

Variables	Germany ($n = 144$)		Turkey ($n = 137$)		p
	N	%	N	%	
1. Sex					.001
Female	138	95.8	111	81	
Male	6	4.2	26	19	
2. Own children					.001
Yes	80	55.6	28	20.4	
No	64	44.4	109	79.6	
3. Marital status					.001*
Single	33	22.9	50	36.5	
In a relationship	33	22.9	51	37.2	
Married	46	31.9	27	19.7	
Divorced	4	2.8	4	2.9	
Widowed	28	19.4	5	3.6	

4. Reason of death					.071*
Disease	92	63.9	106	77.4	
Accidental death	14	9.7	7	5.1	
Suicide	15	10.4	6	4.4	
Homicide	3	2.1	0	0	
Different	14	9.7	13	9.5	
Not known	6	4.2	5	3.6	

Note. $N = 281$. Using chi-square tests. *It needs to be noted that these results might not be valid as in both cases two cell frequencies were smaller than five.

Measurement instruments

Post Traumatic Growth Inventory

The short-form of the Post Traumatic Growth Inventory (PTGI-SF; Cann et al., 2010) consists of ten items and assesses perceived life-changes after a traumatic event occurred across five domains: appreciation of life, relating to others, new possibilities, personal strength and spiritual change. Participants indicated how characteristic each statement is on a Likert-type scale ranging from 0 (I did not experience this change as result of bereavement) to 5 (I experienced this change to a very great degree as result of bereavement). However, only nine items were measured in the present study. The item "I have a stronger religious faith" was not used in the questionnaire as it is unclear if the opposite of this statement cannot be growth too. The PTGI-SF was chosen for the measurement of PTG as its internal reliability is only slightly lower than the full version of the PTGI, and the reliability of the total score was generally in the range of .90 across a variety of samples (Cann et al., 2010). Furthermore, the adjusted correlations between PTGI and PTGI-SF for the total scores were consistently near or above .90, indicating a considerable overlap in the variance (Cann et al., 2010). In order to keep the online questionnaire concrete and the time intensity as little as possible, the PTGI-SF was used. The internal consistency of the present German version of the PTGI is good, with

Cronbach's alpha = .80. The internal consistency of the present Turkish version of the PTGI is also high, with Cronbach's alpha = .87.

Social Support Inventory

The Social Support Inventory (SSI; Timmerman et al., 2000) is a brief, reliable instrument, appropriate for survey studies and which measures the perceived adequacy of support (Timmerman et al., 2000). The SSI consists of four subscales: emotional support, informative support, social companionship and instrumental support. In total, 20 items are each rated on a Likert-type scale ranging from 1 (perceived not enough social support) to 5 (perceived too much social support). According to Timmerman et al., (2000) the internal consistencies are satisfactory for all subscales, with alpha values ranging from .70 to .86. Moreover, some support for the convergent and divergent validity of the SSI was found (Timmerman et al., 2000). For the present German version of the SSI, the internal consistency was excellent, with Cronbach's alpha = .93. The internal consistency of the present Turkish version of the SSI is also excellent with Cronbach's alpha = .95.

Statistical analyses

All relevant tests for the testing of the two hypotheses were carried out using the statistical software IBM SPSS Statistics Version 25. Descriptive analyses were conducted and the existence of statistically significant differences between the German and Turkish samples was tested by using independent-samples t-tests and chi-square tests.

Afterwards, a multiple regression analysis was performed in order to analyze the effect of social support on PTG. Then, a mediation was performed to investigate whether social support predicts PTG and whether this direct path would be mediated by culture (Baron & Kenny, 1986).

Before the results of the multiple regression were interpreted, statistical requirements were inspected. Assumptions about normality, homoscedasticity, outliers, linearity, and independence of residuals were checked by inspecting the Normal Probability Plot of the Regression Standardized Residual and the Scatterplot that were requested as part of the analysis (Pallant, 2011). None of the assumptions were violated. Moreover, there was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1.

Results

The results of the multiple regression revealed that social support and culture statistically significantly predicted PTG, $F(2, 278) = 15.01$, $p < .001$, adj. $R^2 = .091$. Both variables added statistically significantly to the prediction, $p < .001$, whereby culture correlates lower with PTG than social support. Regression coefficients and standardized errors can be found in Table 3. Thus, social support is, as expected, positively associated with PTG, which indicates that bereaved, who perceived social support, show more PTG than bereaved, who perceived less or no social support. In addition, Turkish participants (coded with 1) reported less PTG than German participants (coded with 0).

Table 3
Multiple regression results for social support and culture predicting PTG

PTG	B	95% CI for B		$SE\ B$	β	R^2	ΔR^2
		LL	UL				
Model						.097	.091*
Constant	24.61*	20.15	29.07	2.27			
Social support	.21*	.13	.29	.04	.36*		
Culture	-5.42*	-8.16	-2.67	1.40	-.26*		

Note. B = unstandarized regression coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; $SE\ B$ = standardized error of the coefficient; β = standardized coefficient; R^2 = coefficient of determination; ΔR^2 = adjusted R^2. *$p < .001$.

In the first step of establishing mediation (Baron & Kenny, 1986), the regression with social support predicting PTG was conducted. The results showed that social support

significantly predicted PTG, $F (1, 279) = 14.23$, $p < .001$, $B = .13$, adj. $R^2 = .045$, indicating

that the first criterion for mediation was satisfied. Thus, social support is positively associated

with PTG. Second, the regression with social support predicting culture was conducted. The

results revealed that social support statistically significantly predicted culture, $F (1, 279) =$

109.25, $p < .001$, $B = .02$, adj. $R^2 = .279$, indicating that the second criterion was satisfied too.

According to this significant prediction, Turkish participants reported to perceive more social

support than Germans. Then, the regression with social support and culture predicting PTG

was conducted. The regression of PTG on social support and culture was (as already

mentioned at the very beginning of the results part) significant, $F (2, 278) = 15.01$, $p < .001$,

adj. $R^2 = .091$, suggesting that social support and culture jointly accounted for a significant

amount of variance in PTG. The individual predictors were examined further. The results

showed that culture was a significant predictor of PTG when social support was included in

the model, $B = -5.42$, indicating that the third criterion for mediation was satisfied. According

to this significant prediction, Turkish participants reported less PTG than German participants.

The results showed that social support remained a significant predictor of PTG when culture

was included in the model, $B = .21$, indicating that the fourth criterion for mediation was not

satisfied. However, since step two and three were satisfied, it was suggested that there was a

reduction in the effect of social support on PTG. A partial mediation was supported at this

point. Table 4 presents an overview of all mediation results. To confirm a partial mediation,

the Sobel test was conducted online (Preacher & Leonardelli, 2020), which did not confirm

the existence of a significant mediation effect of culture on the relationship of social support

and PTG ($p = .996$). Thus, the relationship between social support and PTG was, against

expectation, not mediated by the cultural dimension individualism-collectivism.

Table 4

Mediation results after applying the Baron and Kenny method

Dependent	Independent	B	SE B	t	p
Regression 1:					
PTG	Social support	.13	.04	3.77	< .001
Regression 2:					
Culture	Social support	.02	.00	10.45	< .001
Regression 3:					
PTG	Social support	.21	.04	5.34	< .001
	Culture	-5.42	1.40	-3.88	< .001

Discussion

The present study aimed to investigate the relationship between social support and PTG after bereavement in a German and Turkish sample. As anticipated, social support was positively associated with PTG. In other words, bereaved, who perceived more social support, reported higher levels of PTG than bereaved, who perceived to have gotten less social support. Thus, this finding is also in line with the revised model of PTG, which considers social support as a predictor of positive change after a traumatic life event, such as bereavement (Tedeschi & Calhoun, 2004).

Conflicting with the second hypothesis, the mediation analysis revealed that the relationship between social support and PTG was not mediated by the cultural dimension individualism-collectivism. Nevertheless, the findings confirmed, as partially assumed in the second hypothesis, that bereaved from Turkey perceived more social support than bereaved from Germany, which is also in line with previous conducted studies. For instance, Goodwin and Plaza (2000) conducted path analytic analyses and found that collectivism was predictive

of greater levels of family support and higher levels of perceived social support after a stressful event occurred.

However, differently than expected, bereaved from Turkey reported lower levels of PTG than bereaved from Germany, despite the fact that the Turkish participants reported to have perceived more social support than the German participants. One explanatory approach could be that people in collectivistic countries restrain their emotions in order to value the group dynamic, whereas people in individualistic countries imply more openly their emotions towards their social network (Oyserman et al., 2002; Eid & Diener, 2001). Furthermore, Matsumoto et al. (2008) found that individualism was especially associated with expression of positive emotions, which could potentially clarify why individualistic countries like Germany show higher PTG levels than collectivistic countries such as Turkey. Thus, it would be insightful if prospective studies do not only investigate the relationship between perceived social support and PTG, but also take emotional expression of the bereaved into the equation.

Going one step back and reflecting on the construct perceived social support, it would also be essential to get a deeper insight in the different facets of social support: social companionship, emotional, informative, and instrumental support. Potentially, looking at the subscales of the SSI (Timmerman, et al., 2000) would have revealed even more concrete differences between perceived social support of the Turkish and German participants. In addition, future studies should also take into account to not only ask for the perceived social support but also how often bereaved people accepted this offered help.

A possible explanation for the non-confirmed mediation of culture could also be the existence of statistically significant differences between the present German and Turkish samples, especially regarding level of education, religiosity and age of the bereaved. According to Sanders (1981), younger bereaved react stronger to the death of their partner

than older bereaved in the first 18 months of the death. As the Turkish participants were in average significantly younger, it could potentially explain the lower reported levels of PTG. Thus, future cross-cultural studies on PTG should ensure that there are no significant differences between sample groups regarding demographic characteristics, such as level of education, religiosity and age of the bereaved.

It should also be noted that mainly women participated in the present study, which entails that the results are mostly reflecting women's levels of perceived social support and PTG after bereavement.

Moreover, it would have been more useful to include at least two individualistic and two collectivistic countries as well as more participants, in order to obtain a better view of differences regarding the cultural dimension individualism-collectivism. In addition, it should be considered to not only look at individualism-collectivism but also at other cultural dimensions, such as urban-rural differences within a country. In the present study, participants were not asked if they live in urban areas, which promote more individualistic values, or in rural areas, which facilitate more collectivist values (Ayçiçeği-Dinn & Caldwell-Harris, 2013). Alwin (1989) proposed that traditionally collectivist cultures, such as Turkey, adopt individualist values because their populations become more urban and more educated. Furthermore, it should also be noted that there might be differences regarding individualism-collectivism on the individual level, referred to as idiocentrism-allocentrism. Even though cultures of countries may be characterized as predominantly individualist or collectivist, an individual can contain both allocentric and idiocentric tendencies in different situations (Triandis et al., 1985). Therefore, it is inaccurate to examine only the dimension individualism-collectivism, while investigating if the relationship of social support and PTG is mediated by culture.

In conclusion, it can be ascertained that the present study shows the first effort to examine whether culture is mediating the relationship between perceived social support and PTG after bereavement. The results of the present study indicate that more perceived social support predicts higher levels of PTG after losing a loved one. Further research is needed to gain more insights regarding this constellation of variables in a cross-cultural context. In doing so, the above mentioned limitations, such as to also include urban-rural differences within countries and controlling demographic characteristics (e.g., level of education, religion, age) between subgroups, should be considered.

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Appendix A

Short-form of the Post Traumatic Growth Inventory (English)

The following questions are assessing how you experience and perceive life after the loss.

Please be aware, that there are no right and wrong answers and that this is viewed as subjective.

Indicate for each of the statements below the degree to which this change occurred in your life

as a result of the crisis, using the following scale.

0	1	2	3	4	5

0 = I did not experience this change as a result of my bereavement.

5 = I did experience this change to a very great degree as a result of my bereavement.

1. I changed my priorities about what is important in life. (V-1)

2. I have a greater appreciation for the value of my own life. (V-2)

3. I am able to do better things with my life. (II-11)

4. I have a better understanding of spiritual matters. (IV-5)

5. I have a greater sense of closeness with others. (I-8)

6. I established a new path for my life. (II-7)

7. I know better that I can handle difficulties. (III-10)

8. I discovered that I'm stronger than I thought I was. (III-19)

9. I learned a great deal about how wonderful people are. (I-20)

PTGI Factors:

Factor I: Relating to Others   Factor II: New Possibilities   Factor III: Personal Strength

Factor IV: Spiritual Change   Factor V: Appreciation of Life

Short-form of the Post Traumatic Growth Inventory (German)

Die folgenden Fragen beziehen sich darauf, wie Sie ihr Leben nach dem Verlust erleben und wahrnehmen. Bitte beachten Sie, dass es kein richtig oder falsch gibt und das alle Fragen subjektiv sind.

0	1	2	3	4	5

0 = Ich erlebe diese Veränderung als keine Folge meines Verlusts.

5 = Ich erlebe diese Veränderung als bedeutende Folge meines Verlusts.

1. Ich habe neue Vorstellungen darüber, was im Leben wichtig und vorrangig ist. (V-1)

2. Ich habe ein neues Gefühl dafür, wie wichtig mir mein Leben ist. (V-2)

3. Ich fange mehr mit meinem Leben an. (II-11)

4. Ich habe jetzt ein größeres Verständnis für religiöse und geistige Dinge. (IV-5)

5. Ich entwickelte einen Sinn für die Verbundenheit mit Anderen. (I-8)

6. Ich beschritt einen neuen Weg in meinem Leben. (II-7)

7. Ich weiß jetzt, dass ich mit Schwierigkeiten umgehen kann. (III-10)

8. Ich entdeckte, dass ich starker bin als ich dachte. (III-19)

9. Ich erfuhr eine Menge darüber, wie gut Menschen sind. (I-20)

Short-form of the Post Traumatic Growth Inventory (Turkish)

Aşağıdaki sorular, kayıptan sonra hayatı nasıl deneyimlediğinizi ve algıladığınızı

değerlendirmektedir. Lütfen doğru ve yanlış cevapların olmadığını ve bunun oldukça öznel

olarak görüldüğünü unutmayın.

0	1	2	3	4	5

0 = Travmadan
dolayı böyle bir
değişiklik
yaşamadım.

5 = Travmadan
dolayı bu
değişikliği aşırı
derecede
yaşadım.

1. Hayatıma verdiğim değer arttı. (V-1)

2. Hayatımın kıymetini anladım. (V-2)

3. Hayatımı daha iyi şeyler yaparak geçirebileceğimi anladım. (II-11)

4. Manevi konuları daha iyi anladım. (IV-5)

5. Kendimi diğer insanlara daha yakın hissetmeye başladım. (I-8)

6. Hayatıma yeni bir yön verdim. (II-7)

7. Zorluklarla başa çıkabileceğimi anladım. (III-10)

8. Düşündüğümden daha güçlü olduğumu anladım. (III-19)

9. İnsanların ne kadar iyi olduğu konusunda çok şey öğrendim. (I-20)

Appendix B

Social Support Inventory (English)

The following questions are assessing how you perceive support from your social environment. Please be aware, that there are no right and wrong answers and that this is viewed as subjective.

1	2	3	4	5

1 = I perceived not enough social support.

5 = I perceived too much social support.

1. Cheers you up.

2. Supports your actions.

3. Pays you a social visit.

4. Lends you small things like effects or a little money.

5. Says to you "That is the right way".

6. Hugs you or cherishes you.

7. Gives you advice on all kinds of small domestic problems.

8. Calls you up just for a chat.

9. Feels with you.

10. Makes constructive criticism about you.

11. Takes you somewhere.

12. Shows affection for you.

13. Takes care of diversion.

14. Offers you help under special circumstances, like illness, moving, babysitting.

15. Makes you understand why you did something wrong.

16. Goes shopping, to the cinema, to a match or just a day out with you.

17. Caresses you.

18. Offers you practical help with daily matters, like housekeeping or a small job.

19. Emphasizes your strong points.

20. Invites you to a party or for dinner.

> Emotional support: items 1, 6, 9, 12 and 17

> Informative support: items 2, 5, 10, 15 and 19

> Social companionship: items (3), 8, 13, 16 and 20

> Instrumental support: items 4, 7, 11,14 and 18

Social Support Inventory (German)

Die folgenden Fragen beziehen sich darauf, wie Sie Hilfe oder Support aus ihrem sozialen Umfeld wahrnehmen. Bitte beachten Sie, dass es kein richtig oder falsch gibt und das alle Fragen subjektiv sind.

1	2	3	4	5

1 = Ich habe viel zu wenig soziale Unterstützung erhalten.

5 = Ich habe viel zu viel soziale Unterstützung erhalten.

1. Du wirst aufgemuntert.

2. Deine Handlungen werden unterstützt.

3. Du wirst besucht.

4. Du kannst dir ein bisschen Geld oder andere Dinge ausleihen.

5. Dir wird gesagt "Das ist der richtige Weg, die richtige Entscheidung."

6. Du wirst umarmt oder anders wertgeschätzt.

7. Du bekommst Ratschläge bezüglich jeglicher, familiärer Probleme.

8. Du wirst angerufen, um ein bisschen zu plaudern.

9. Jemand fühlt mit dir.

10. Du erhältst konstruktive Kritik über dich selbst.

11. Du wirst zu einem Ausflug abgeholt.

12. Du bekommst Zuneigung.

13. Du wirst abgelenkt.

14. Dir wird Hilfe angeboten unter besonderen Umständen, wie Krankheit, Umzug oder z.B. Babysitting.

15. Dir wird zu verstehen gegeben, dass du etwas falsch gemacht hast.

16. Du gehst mit einer dir nahestehenden Person shoppen, ins Kino oder ihr verbringt den Tag anderweitig zusammen.

17. Du bekommst Zärtlichkeiten (z.B. gestreichelt, umarmt).

18. Du bekommst praktische Hilfe bei alltäglichen Sachverhalten angeboten, wie Haushaltshilfe oder beruflicher Beistand.

19. Du wirst auf deine Stärken aufmerksam gemacht.

20. Du wirst zu einer Party/Feier oder zum Essen eingeladen.

Social Support Inventory (Turkish)

Sonraki sorular sosyal çevrenizden nasıl bir destek hissettiğinizi ölçecektir. Lütfen doğru veya yanlış bir cevap olmadığını ve cevapların öznel olduğunun ayrımında olun.

1	2	3	4	5

1 = Asla

5 = Büyük bir çoğunlukla

1. Sizi neşelendirir.

2. Yaptıklarınızı destekler.

3. Toplu ziyarette bulunur.

4. Size eşya veya borç gibi küçük ödünçler verir.

5. Size "Doğru yol budur." der.

6. Size sarılır veya değer verir.

7. Size her çeşit küçük aile içi sorunlarınızla ilgili tavsiyeler verir.

8. Yalnızca konuşmak için bile arar.

9. Duygularınızı/hislerinizi paylaşır.

10. Hakkınızda yapıcı eleştiride bulunur.

11. Sizi bir yerlere götürür.

12. Size alaka gösterir.

13. Kafanızı (dikkatinizi) dağıtır.

14. Hastalık, taşınma, bebek bakımı gibi özel durumlarda size yardım önerisinde bulunur.

15. Bir şeyi neden yanlış yaptığınızı anlamanızı sağlar.

16. Sizinle alışverişe, sinemaya, maça gider veya bir günü seninle geçirir.

17. Sizi önemser.

18. Ev hizmetleri veya küçük bir iş gibi günlük konularda pratik yardım sunar.

19. Güçlü yanlarınızı vurgular.

20. Sizi bir partiye veya yemeğe davet eder.