



The Link Between Major Life Events and Quality of Life: The Role of Compassionate Abilities

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Abstract

This study examined whether compassionate skills (the ability to be self-compassionate and to receive compassion from others) operate as mediator processes in the relationship between negative major life events and psychological quality of life (QoL), in 467 adults. The path model accounted for 48% of psychological QoL variance and indicated that negative appraisal of major life events was associated with decreased psychological QoL, through increased levels of shame and less compassionate abilities. Findings support the importance of community programmes to enhance psychological QoL, that help individuals cultivate self-compassion and the ability to receive compassion from others, especially in face of adverse events.

Keywords Major life events · Shame · Compassionate abilities · Psychological quality of life (QoL)

Introduction

Major life events can be defined as explicit and discrete events (i.e., with a clear onset and ending) which represent a meaningful life change and require personal demands for adjustment (e.g., Wheaton 1990, 1999). Major life events relate to several situations such as marriage, divorce, separation or pre-marital break-up, having a child, death or hospitalization of a family member or a loved one, and significant job promotions or change. These life events, both those perceived as positive or negative, can be conceptualized as stressors since they may significantly interfere with ongoing life and can have a significant impact on the well-being and quality of life (Dohrenwend 2006; McKnight et al. 2002; Wanic and Kulik 2011).

There is consistent evidence that major life events may have significant impact on well-being and mental health (e.g., Hammen 2005; Kessler 1997; Tennant 2002). However, this effect seems to depend on how individuals appraise these events (e.g., Cleland et al. 2016). Indeed, life events

appraised as positive seem to require less adaptation effort than negative ones (Pocnet et al. 2016). Prospective studies have shown a significant association between negative life events and poorer psychological health (e.g., Mundt et al. 2000; Kessing et al. 2003). Psychological distress and functional impairment seem to be mainly associated with negative appraisal of the events rather than to the objective nature of actual events (for a review see Paykel 2003). Besides the appraisal of life events, it is also important to consider other variables (such as perception of social support, personal coping strategies and self-attribution and judgment about the event) which can interfere in both the appraisal of the events and in the relationship between life events and well-being (e.g., Luhmann et al. 2012). In accordance, it has been shown that when faced with identical intensity and frequency of life events, people who reported higher levels of perceptions of social rejection or exclusion and feelings of loneliness tend to present increased levels of perceived stress associated with these life events, than non-lonely and more socially connected individuals (Cacioppo et al. 2003; Cacioppo and Patrick 2008; Nuske et al. 2016). Also, those who experience loneliness and/or social isolation reported a greater negative impact of major life events in their well-being, both physical and psychological (Kearns et al. 2015).

Moreover, in face of events appraised as negative or unwanted (e.g., divorce, job loss) an individual may make negative self-attribution (i.e., depreciation and/or self-blaming attribution about the occurrence of this event) and

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experience shame feelings because of not being able to meet his own and/or others' expectations in certain life domains (Lickel et al. 2014; Rubenstein et al. 2016).

Shame is commonly defined as a painful emotion characterized by a global sense of personal inferiority, inadequacy and devaluation (Gilbert 2000, 2007; Tangney and Dearing 2002). According to the evolutionary biopsychosocial model, shame can be understood as an affective-defensive response, rooted in the competitive dynamics of human life, designed to monitor one's social rank and activate more adjusted behaviours to promote social acceptance (e.g., Gilbert 2000, 2003, 2010). Besides its adaptive value, higher levels of shame feelings are associated with poorer adjustment, psychological quality of life and increased vulnerability to psychopathological symptoms (Ferreira et al. 2016; Gilbert and Irons 2005; Velotti et al. 2017; Zhang et al. 2018).

Moreover, given that major life events can have a pervasive and persistent impact on one's well-being (Phillips et al. 2015), it is important to identify potential protective emotional skills against negative or unwanted major life events.

According to contextual and behavioural psychotherapeutic approaches (such as Compassion and Acceptance-based; Gilbert 2009; Hayes et al. 2012) the impact of life difficulties, failures or losses may be more determined by one's ability to adaptively deal with those experiences rather than by the event itself (Segal et al. 2002; Leary et al. 2007; Pinto-Gouveia et al. 2014). Previous literature about the stress of life transitions emphasized that the way the individual copes with major life milestones is a main determinant of one's well-being (e.g., Allen and Leary 2010; Wheaton 1990).

Compassionate skills may play a protective role against the impact of major life events and represent adaptive strategies to manage the internal and external burden of stressful circumstances. Compassion may be defined in many ways and different measures have been developed to assess this ability. In accordance with Gilbert's evolutionary biopsychosocial model, compassion may be conceptualised as the sensitivity and tolerance to distress in self and others, combined with the commitment and ability to take helpful actions to alleviate and prevent suffering (Gilbert 2014). This perspective involves the clear distinction of two dependent and interacting sets of compassionate abilities: (i) motivated attention/ engagement abilities (i.e., motivation to engage with suffering and sensitivity and tolerance to distress) and (ii) motivated action abilities (i.e., the ability to take helpful actions and to create feelings of support, kindness and encouragement to deal with distress). From this perspective, Gilbert et al. (2017) developed three new measures of compassion abilities which access (1) compassion experienced for others, (2) the compassion experienced from others, and (3) self-compassion.

It is now clear that compassionate skills are helpful and positively associated with several well-being indicators (e.g., Cosley et al. 2010; Neff 2003; Neff et al. 2007). Empirical evidence has demonstrated the relationship between self-compassion and positive emotional reactions to unwanted or negative life events (Leary et al. 2007). Self-compassion (i.e., holding a compassionate attitude towards one's own suffering) is an adaptive emotion regulation process, mostly relevant to deal with inevitable life-related difficulties and stressful circumstances (Neff and Dahm 2015; Neff and Tirsch 2013). Literature emphasizes that self-compassion fosters adaptive, effective and sustained responses in face of perceived failures and setbacks (Allen and Leary 2010; Neff et al. 2007). Research has consistently supported that self-compassion is highly related to adaptive functioning and positive health outcomes (e.g., Gilbert 2007; Neff 2003; Neff et al. 2007), and negatively associated with depression, anxiety, self-criticism, rumination, thought suppression (Barnard and Curry 2011; MacBeth and Gumley 2012; Neff et al. 2007; Sharpiro et al. 2005) and cortisol levels (Pace et al. 2009). In this sense, self-compassion may further facilitate acceptance of life challenging circumstances and promote the engagement in a committed action to foster one's and others' well-being (e.g., Neff et al. 2007).

At the same time, evidence suggests that compassionate support from others has a major impact on resilience to distress and a range of health indices (e.g., Gilbert et al. 2017; Hermanto et al. 2016). According to Gilbert et al. (2017), compassion from others refers to capacity for receiving compassion from others and to feeling soothed and cared for, when we feel they are supportive and have compassion abilities. A recent study demonstrated that being open and receptive to support, care, and kindness from others may buffer the depressogenic effect of self-criticism, while being uncomfortable or fearful of receiving compassion in their relationships exacerbates this effect (Hermanto et al. 2016). Recent literature suggested that the ability to be aware of others' kindness and compassion, and to receive it, may reduce negative mental health indicators and associate with positive outcomes (e.g., Gilbert et al. 2017; Hermanto et al. 2016; Matos et al. 2017; Silva et al. 2018).

To sum up, prior evidence has demonstrated the link between stressful events and poorer well-being and quality of life. Nonetheless, further research is necessary to better understand potential mechanisms that protect individuals from the negative impact of major life events. The goal of the present study was to contribute towards a greater understanding about how compassionate skills (both self-compassionate abilities and capacity to receive compassion from others) may operate as adaptive and protective emotional regulation strategies to cope with adverse or difficult life events.

We hypothesized that negative major life events may be associated with general feelings of shame (i.e., feelings of inferiority or inadequacy) which may promote decreased levels of psychological quality of life. Moreover, it was expected that compassionate skills (that is the ability to be self-compassionate and to be aware and to receive kindness and compassion from others) may mediate the associations between the occurrence of negative life events and psychological QoL. Identifying emotional processes that can promote resilience against the pervasive effect of such life events was therefore the major goal of this study.

Material and Methods

Participants

This sample included 467 participants from the community (347 women and 120 men). Participants' age ranged from 18 to 60 years ($M = 29.67$; $SD = 11.28$) and their years of education ranged from 4 to 25 ($M = 14.19$; $SD = 2.30$). Regarding marital status, 354 (75.8%) participants were single, 59 (12.6%) were married or partnered, 50 (10.7%) were divorced and 4 (0.9%) were widowed. Results indicated that there were no sex differences in these demographic variables: $t_{age(465)} = 0.47$, $p = 0.641$; $t_{education(465)} = -1.54$, $p = 0.125$; $\chi^2_{relationship(3)} = 6.52$, $p = 0.089$.

Measures

Major Live Events Questionnaire (MLEQ; Trindade and Ferreira 2017). MLEQ was adapted from Live Events List (Cohen et al. 1991) and consisted of a list of 22 major life events (such as marriage, separation or divorce, illness, significant changes in personal finances) that might happen in one's life. To calculate the number of major life events that occurred in last year, and participant's positive or negative appraisal of these events, respondents were asked to indicate the occurrence or non-occurrence of each event in last 12 months. Also, regarding an event that indeed occurred, participants were asked to rate the perceived impact on their lives in a 3 points scale: positive impact (1 = "slightly good"; 2 = "moderately good"; 3 = very good) or negative impact (1 = "slightly bad"; 2 = "moderately bad"; 3 = "very bad"). Thus, the questionnaire scored the number of major life events that occurred in last year, and also participant's positive or negative appraisal of these events.

Other As Shamer Scale- short version (OAS 2; Matos et al. 2015). OAS 2 is an 8-item scale that measures external shame (i.e., global judgements or perceptions that others evaluate the self negatively). Participants are asked to rate, using a 5-point scale (ranging from 0 = "never" to 4 = "almost always") the frequency of their shame feelings

and experiences (e.g., "I think that other people look down on me" and "Others think there is something missing in me"). Higher scores on this scale indicate high external shame. OAS 2 presented high internal consistency, with Cronbach's alphas of .82 in the original study (Matos et al. 2015) and of .89 in this study.

Compassionate Engagement and Action Scales (CEAS; Gilbert et al. 2017). CEAS is a self-report measure that includes three scales that assess: compassion for the self, compassion for others, and compassion received from others. Each scale comprised two subscales assessing the two core components of this construct: compassionate attributes (i.e., the sensitivity to the suffering of self and others); and compassionate actions (i.e., attitudes and behaviours that translate the commitment to alleviate and/or prevent suffering). Participants were asked to rate each item in a 10-point scale (1 = "never" to 10 = "always"), with higher scores revealing higher levels of compassionate skills in the different directions evaluated. In the original study, which presented the study of development and psychometric properties of CEAS in two different languages in three different samples (UK, Portugal and USA), all three scales presented good validity (Gilbert et al. 2017). In the present study the scales compassion for the self and compassion received from others were used, and revealed Cronbach's alphas of .89, and .94, respectively.

World Health Organization Brief Quality of Life Assessment Scale (WHOQOL-BREF; WHOQOL Group 1998; Canavarró et al. 2009). The WHOQOL-BREF is a short-form scale of perceived quality of life (QoL), assessed on four broad domains: physical health, psychological health, environmental health, and social relationships. The scale comprises 26 items rated on a 5-point scale, with higher scores indicating higher levels of perceived QoL. The WHOQOL-BREF presents adequate psychometric properties in its original (with Cronbach's alphas varying between .66 and .84) and Portuguese validation studies (α s between .67 and .87). For the purpose of this study, only the psychological domain was used, and presented an alpha of .82 in the current study.

Procedure

The present study is part of a wider ongoing research regarding the role of distinct emotional regulation processes on well-being and quality of life (QoL). All procedures performed in this study respected ethical requirements of research in human beings. Also, Scientific & Ethics Committee of the Faculty of Psychology and Educational Sciences, University of Coimbra (FPCEUC) approved the implementation of this study and its test protocol.

Participants were recruited through social network (Facebook) and by email invitations, which included information

regarding the aims and procedures of the study, the voluntary and confidential nature of the participation, and criteria for inclusion (being aged between 18 and 60 years old). The online advertisement also included a link to which redirected potential participants to a secure online survey with a written informed consent and test protocol.

Data Analysis

Descriptive and frequency analyses were performed to analyse the characteristics of the sample used in the current study. Pearson correlation coefficients were calculated to examine the relationships between positive and negative appraisal of major life events, general feelings of shame, compassionate skills and psychological QoL (Cohen et al. 2003). These analyses were conducted using the SPSS software (v.21 SPSS; Armonk, NY: IBM Corp.).

To explore the associations between the variables under analysis in the proposed theoretical model a series of path analyses were conducted using the software AMOS (v.21 SPSS; Armonk, NY: IBM Corp.). The examined model tested whether the association between negative appraisal of major life events (exogenous variable) and psychological QoL (endogenous variable) would be mediated by general feelings of shame and compassionate skills (self-compassion and ability to receive compassion from others) (endogenous mediator variables), while controlling for age. The Maximum Likelihood method was used to estimate model paths coefficients and to compute fit statistics. Moreover, a set of goodness of fit indices was used to analyse the plausibility of the model: Chi-Square (χ^2) and Normed Chi-Square (χ^2/df); Comparative Fit Index (CFI) and Tucker Lewis Index (TLI), with values above .95 indicating a very good adequacy of the model; and the Root-Mean Square Error of Approximation (RMSEA) with 95% confidence interval (CI), with nonsignificant values below .05 indicating very good fit (Kline 2005). Furthermore, mediation effects were analysed using the Bootstrap resampling method with 2000 bootstrap samples and 95% bias-corrected confidence interval. Each effect was considered statistically significant ($p < .05$) if the interval between lower and upper bound confidence interval does not comprise zero (Kline 2005).

Results

Preliminary Data Analyses

The values of Skewness (Sk) and kurtosis (Ku) were analysed to test the normality of the distribution of the study variables (Kline 2005). The Skewness values ranged from $- .67$ to 1.57 (in psychological QoL and in negative appraisal of major life events, respectively), while Kurtosis

presented values ranged from $- .05$ to 3.04 (in the compassion for self and in negative appraisal of major life events, respectively). Once results revealed no severe violation of normal distributions ($|Sk| < 3$ and $|Ku| < 8-10$; Kline 2000) and the absence of extreme outliers, the outliers were kept in the analysis to represent the variability of the constructs under examination.

Descriptive and Correlations Analyses

The number of major life events reported ranged from 0 to 12, with a mean of 3.16 ($SD = 2.12$). Results revealed that 61.5% of the sample reported between zero and three major life events, and 38.5% reported between 4 and 12 major life events occurred in the last year.

Three hundred seventy-four participants reported some degree of negative impact associated with an event that occurred in their life during previous years and 287 participants referred some level of positive impact linked to a particular life event.

Correlation results (Table 1) indicated that age revealed non-significant associations with negative appraisal of major life events and compassion from others. Moreover, results indicated negative weak associations between age and positive appraisal of major life events and shame, and positive albeit weak associations with compassion for self and psychological QoL. Also, positive and weak associations were found between the number of major life events occurred last year with shame experiences and psychological QoL.

Moreover, results revealed that negative appraisal of major life events were linked with higher levels of external shame and decreased psychological QoL, which were negatively linked with each other. In addition, negative appraisal of major life events and general feelings of shame revealed to held negative correlations with skills of being self-compassionate and to receive compassion from others, and both of these processes presented positive associations with psychological QoL. In turn, positive appraisal of major life events presented a non-significant correlation with general feelings of shame and psychological QoL. Therefore, positive appraisal was not considered in the following analyses.

Path Analyses

The initial model aimed at exploring whether negative appraisal of major life events would impact on psychological QoL, via increased general feelings of shame (OAS 2) and decreased self-compassion and abilities to receive compassion from others. (CEAS), controlling for the effect of age and number of major life events in last year. The model was first analysed through a fully saturated model (i.e., zero degrees of freedom), which comprised 35 parameters. However, analyses indicated that nine paths were not significant:

Table 1 Means (M), Standard Deviations (SD), and Intercorrelation scores on self-report measures ($N=467$)

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Age	29.67	11.28	–						
2. Number major life events	3.16	2.12	-.16***	–					
3. Positive major life events	2.40	3.44	-.22***	–	–				
4. Negative major life events	3.85	3.91	.06	–	–	–			
5. Shame	8.00	5.28	-.17***	.15**	.02	.14**	–		
6. Compassion for self	52.73	12.79	.11*	-.01	.10*	-.10*	-.42***	–	
7. Compassion from others	65.56	14.52	.01	-.06	.11*	-.09*	-.28***	.37***	–
8. Psychological QoL	70.25	14.47	.11*	-.11*	.08	-.17***	-.57***	.58***	.37***

Number major life events (Number of major life events occurred in last year assessed by MLES); Positive and Negative major life events (Positive and Negative appraisal of major life events assessed by MLES); Shame (assessed by OAS 2); Compassion for self and from others (assessed by CEAS scales); Psychological QoL (assessed by WHOQOL-BREF Psychological quality of life subscale)

* $p < .05$; ** $p < .01$; *** $p < .001$

the direct effect of number of major life events on shame ($b_{\text{number of major life events}} = .01$; $SE_b = .18$; $Z = .08$; $p = .936$); the direct effect of number of major life events on compassion experienced from others ($b_{\text{number of major life events}} = .26$; $SE_b = .49$; $Z = .54$; $p = .593$) the direct effect of age on psychological QoL ($b_{\text{age}} = .04$; $SE_b = .05$; $Z = .76$; $p = .449$); the direct effect of age on compassion experienced from others ($b_{\text{age}} = -.05$; $SE_b = .06$; $Z = -.79$; $p = .431$); the direct effect of number of major life events on psychological QoL ($b_{\text{number of major life events}} = .40$; $SE_b = .35$; $Z = 1.14$; $p = .254$); the direct effect of negative appraisal of major life events on compassion experienced from others ($b_{\text{negative major life events}} = -.20$; $SE_b = .17$; $Z = -1.22$; $p = .223$); the direct effect of negative appraisal of major life events on self-compassion ($b_{\text{negative major life events}} = -.38$; $SE_b = .21$; $Z = -1.84$; $p = .066$); the direct effect of number of major life events on self-compassion ($b_{\text{number of major life events}} = .10$; $SE_b = .25$; $Z = .41$; $p = .685$), and the direct effect of age on self-compassion ($b_{\text{age}} = .06$; $SE_b = .05$; $Z = 1.25$; $p = .211$); These nonsignificant paths were gradually removed and the model was readjusted.

The final model explained 48% of psychological QoL and revealed an excellent model fit [$\chi^2_{(9)} = 9.37$, $p = .403$, $CMIN/DF = 1.04$; $CFI = 1.00$; $TLI = .99$; $RMSEA = .009$, $p = .928$; 95% $CI = .00$ to $.05$,] (Kline 2005). Furthermore, all path coefficients were statistically significant ($p < .05$) and presented the expected directions. Particularly, negative appraisal major life events had a direct effect of $-.07$ on psychological QoL ($b_{\text{negative major life events}} = -.26$; $SE_b = .13$; $Z = -2.05$; $p = .040$) and of $.15$ on shame ($b_{\text{negative major life events}} = .21$; $SE_b = .06$; $Z = 3.41$; $p < .001$). In turn, shame had a direct effect of $-.41$ on self-compassion ($b_{\text{shame}} = -1.00$; $SE_b = .10$; $Z = -9.83$; $p < .001$), of $-.28$ on compassion experienced from others ($b_{\text{shame}} = -.77$; $SE_b = .12$; $Z = -6.27$; $p < .001$) and of $-.37$ on psychological QoL ($b_{\text{shame}} = -1.00$; $SE_b = .10$; $Z = -9.81$; $p < .001$). Results also showed that self-compassion had a direct

effect of $.37$ on psychological QoL ($b_{\text{self-compassion}} = .42$; $SE_b = .04$; $Z = 9.64$; $p < .001$), in turn, compassion experienced from others had a direct effect of $.13$ on psychological QoL ($b_{\text{compassion experienced from others}} = .13$; $SE_b = .04$; $Z = 3.51$; $p < .001$).

The analysis of indirect effects showed that negative appraisal major life events presented an indirect effect of $-.06$ (95% $CI = -.11 / -.02$) on self-compassion and $-.04$ (95% $CI = -.08 / -.02$) on compassion experienced from others, whose were fully mediated through shame. In turn, shame presented an indirect effect of $-.19$ (95% $CI = -.24 / -.15$) on psychological QoL, which was partially mediated through self-compassion and compassion experienced from others. Results also demonstrated that negative appraisal of major life events presented indirect effects of $-.09$ on psychological QoL through shame and compassions abilities (95% $CI = .14 / -.03$).

Overall, the analysis of this model accounted for 48% of psychological QoL's variance and revealed that general feelings of shame, self-compassion and abilities to receive compassion from others mediate the impact of negative appraisal major life events on psychological QoL (see Fig. 1).

Discussion and Conclusion

There is a consistent body of evidence on the significant interference of major life events (such as marriage, divorce, having a child, death or hospitalization of a family member, and significant job changes) with individual well-being and quality of life (e.g., Dohrenwend 2006; McKnight et al. 2002; Wanic and Kulik 2011). However, emotional and psychological mechanisms that may ameliorate the impact of these events on ones' quality of life (considered a main aspect of individuals' level of health; Camfield and Skevington 2008) remain unclear. Therefore, this research aimed to examine whether compassionate skills (both

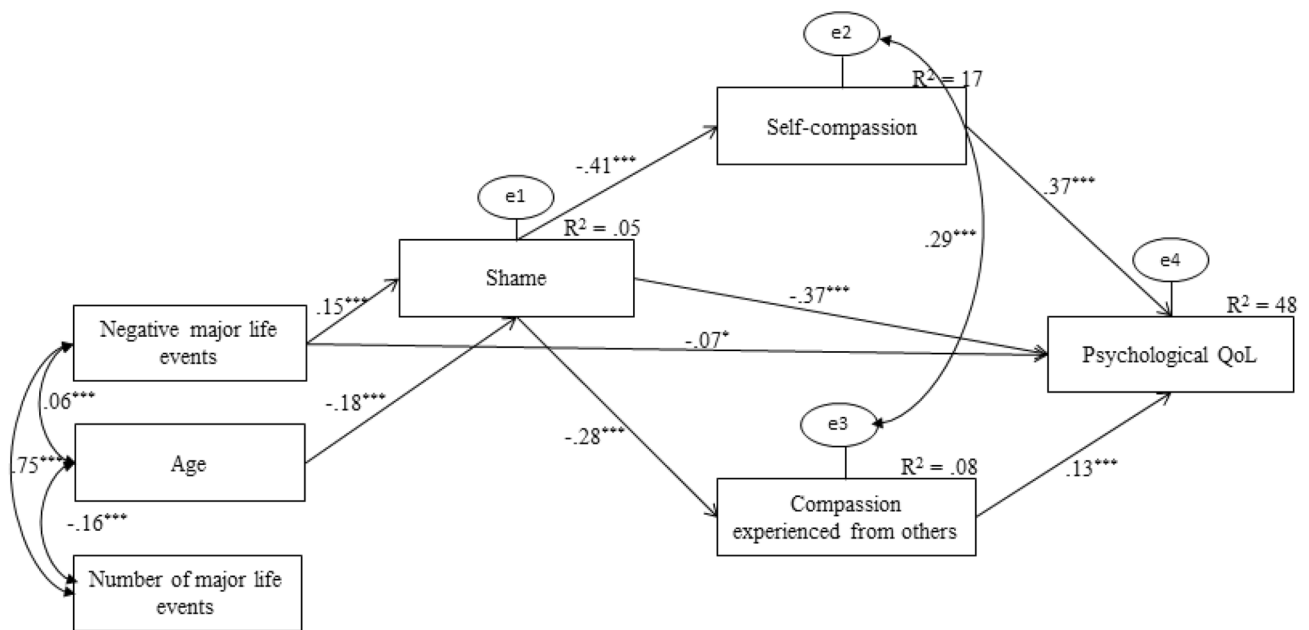
Final Path Model ($N = 467$)

Fig. 1 Final path model ($N=467$). Number major life events (Number of major life events occurred in last year assessed by MLES); Negative major life events (Negative appraisal of major life events assessed by MLES); Shame (assessed by OAS 2); Self-compassion

and Compassion experienced from others (assessed by Compassion for self and from others—CEAS scales); Psychological quality of life (assessed by WHOQOL-BREF)

self-compassionate abilities and the capacity to receive compassion from others) may operate as adaptive and protective emotional regulation strategies to cope with distressing contexts.

Correlation results support prior theoretical and empirical accounts (e.g., Cleland et al. 2016; Dohrenwend 2006; Wanic and Kulik 2011) by showing that negative appraisal of major life events is associated with decreased psychological QoL. Also, our results build and expand prior studies that identified that the occurrence of stressful major life events is associated with higher levels of general feelings of shame (i.e., sense of inadequacy and inferiority). Indeed, this result is consistent with the underlying hypothesis that the occurrence of life events appraised as negative or unwanted (e.g., divorce, job loss) may be associated with negative self-attribution (i.e., depreciation and/or self-blaming attribution about the occurrence of this event) and higher levels of shame for not being able to meet ones and others' expectations in certain life domains (Lickel et al. 2014; Rubenstein et al. 2016).

Findings also supported that compassionate abilities (both of being self-compassionate and receiving compassion from others) are positively associated with psychological QoL. Specifically, and in line with previous studies (e.g., Cosley et al. 2010; Neff 2003; Neff et al. 2007), our results showed

that a diminished ability to be self-compassionate was associated with decreased levels of psychological well-being.

Moreover, results showed that people who presented higher difficulties in experiencing kind and compassionate attitudes from others tend to report lower levels of psychological QoL. This finding is particularly important as it expanded insights on the impact of ones' ability to receive compassion from others on psychological well-being (Gilbert et al. 2017; Hermanto et al. 2016; Silva et al. 2018).

In addition, the present study aimed at exploring whether the impact of major life events appraised as negative on ones' quality of life is influenced by the experience of shame and compassionate abilities. The tested model explained 48% of psychological QoL's variance and revealed a very good fit to the data. In particular, this model proposed that the occurrence of major life events appraised as negative directly predicted higher shame-related experiences (i.e., feeling that others look down on the self) and lower psychological QoL. The mediational paths uncovered in tested model suggested that the impact that these negative major life events may have on QoL is highly dependent on how individuals are able to be self-compassionate (i.e., to offer themselves the comfort, warmth and support to cope with adverse situations) and to be aware to, and receive kindness and compassion from others. Indeed, this study highlights that more than

the occurrence of negative life events, it is the way one copes with these adverse experiences that is the key to the determination of one's psychological QoL. Indeed, these results suggest that the ability to self-compassionate and the capacity to receive kindness and compassion from others may have a protective effect against the negative impact of adverse life experiences on psychological well-being. This finding is in line with prior research which demonstrated that, in face of negative external events, being self-compassionate may facilitate acceptance of adverse experiences and create the opportunity to engage in proactive and effective behaviours (Neff et al. 2007). Also, data corroborated that being more aware and receptive to feelings of compassion and support from others may foster one's resilience to distress (e.g., Gilbert et al. 2017; Hermanto et al. 2016).

The present study has some limitations that need to be acknowledged. Although these findings were supported by robust statistical analysis, its cross-sectional design does not allow to establish causal conclusions. Prospective or experimental studies should be conducted to better understand the casual associations between the occurrence of major life events and the impairment on QoL, and how compassionate abilities may mediate this association. Secondly, the external validity of the findings is limited as analyses were conducted on a Portuguese community sample. Future research is needed to evaluate if these findings are replicable in different samples (e.g., clinical samples) and contexts (e.g., English speaking countries). Thirdly, some limitations may be attributed to the compassion from others scale. This scale was designed to measure people's ability to turn to others and experience others as affiliative and helpful, nonetheless Gilbert et al. (2017) referred that this scale may present some limitation in tapping this dimension. Lower levels reported in this measure by some individuals (i.e., a poor experience of the compassionate from others) may be due to the fact they present internal constraints in receiving compassion from others (i.e., others' kindness, support and compassion) or due to external constraints, such as being isolated, being surrounded by people who are critical and have difficulty expressing care and affection or don't want to provide compassion. Lastly, since the main aim of the current study was to specifically address the role of compassionate skills in face of negative or adverse life events, the parsimonious model examined in the current study is incomplete. The role of other potentially relevant emotional processes (e.g., acceptance, flexible attention to the present-moment, committed action) that may contribute to explain the effect of major life events on QoL should thus be explored further in future studies.

Key to our findings was how the impact of major life events appraised as negative on QoL may be highly dependent on one's ability to be aware of, and to receive kindness and compassion from others, and to be self-compassionate

in face of adverse or challenging situations. In fact, compassionate skills (both the capacity to receive compassion from others and self-compassionate abilities) emerge in this model as important emotion regulation processes that may ameliorate the link between negative major life events and the subjective perception of QoL. In this sense, this study offers important implications by supporting the development of community-based interventions that focus on the cultivation of compassionate skills to promote QoL.

References

- Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass*, 4(2), 107–118. <https://doi.org/10.1111/j.1751-9004.2009.00246.x>.
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15(4), 289–303. <https://doi.org/10.1037/a0025754>.
- Cacioppo, J. T., Hawkley, L. C., & Berntson, G. G. (2003). The anatomy of loneliness. *Current Directions in Psychological Science*, 12, 71–74. <https://doi.org/10.1111/1467-8721.01232>.
- Cacioppo, J. T., & Patrick, W. (2008). *Loneliness*. New York: Norton.
- Camfield, L., & Skevington, S. M. (2008). On subjective well-being and quality of life. *Journal of Health Psychology*, 13(6), 764–775. <https://doi.org/10.1177/1359105308093860>.
- Canavarro, M. C., Vaz Serra, A., Simões, M., Rijo, D., Pereira, M., Gameiro, S., ... Paredes, T. (2009). Development and psychometric properties of the World Health Organization quality of life assessment (WHOQOL-100) in Portugal. *International Journal of Behavioral Medicine*, 16, 116–124. <https://doi.org/10.1007/s12529-008-9024-2>
- Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). New Jersey: Lawrence Erlbaum Associates.
- Cohen, S., Tyrrell, D. A. J., & Smith, A. P. (1991). Psychological stress and susceptibility to the common cold. *New England Journal of Medicine*, 325, 606–612.
- Cosley, B. J., McCoy, S. K., Saslow, L. R., & Epel, E. S. (2010). Is compassion for others stress buffering? Consequences of compassion and social support for physiological reactivity to stress. *Journal of Experimental Social Psychology*, 46(5), 816–823. <https://doi.org/10.1016/j.jesp.2010.04.008>.
- Cleland, C., Kearns, A., Tannahill, C., & Ellaway, A. (2016). The impact of life events on adult physical and mental health and well-being: Longitudinal analysis using the GoWell health and well-being survey. *BMC Research Note*, 9, 470. <https://doi.org/10.1186/s13104-016-2278-x>.
- Dohrenwend, B. P. (2006). Inventorying stressful life events as risk factors for psychopathology: Toward resolution of the problem of intracategory variability. *Psychological Bulletin*, 132(3), 477–495. <https://doi.org/10.1037/0033-2909.132.3.477>.
- Ferreira, C., Mendes, A. L., & Marta-Simões, J. (2016). The role of maladaptive psychological strategies in the association between shame and psychological quality of life. *European Psychiatry*, 41, S86. <https://doi.org/10.1016/j.eurpsy.2017.01.270>.
- Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology and Psychotherapy*, 7, 174–189. [https://doi.org/10.1002/1099-0879\(200007\)7:3%3c174::AIDCPP236%3e3.0.CO;2-U](https://doi.org/10.1002/1099-0879(200007)7:3%3c174::AIDCPP236%3e3.0.CO;2-U).
- Gilbert, P. (2003). Evolution, social roles and the differences in shame and guilt. *Social Research: An International Quarterly*, 70, 1205–1230. Retrieved from <https://www.jstor.org/stable/40971967>

- Gilbert, P. (2007). The evolution of shame as a marker for relationship security. In J. Tracy, R. Robins, & J. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283–309). New York: Guilford.
- Gilbert, P. (2009). Introducing compassion focused therapy. *Advances in Psychiatric Treatment*, 15(3), 199–208. <https://doi.org/10.1192/apt.bp.107.005264>.
- Gilbert, P. (2010). *Compassion focused therapy: The CBT distinctive features series*. London: Routledge.
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *The British Journal of Clinical Psychology*, 53(1), 6–41. <https://doi.org/10.1111/bjc.12043>.
- Gilbert, P., Catarino F., Duarte C., Matos M., Kolts R., Stubbs J.,... & Basran, J. (2017) The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care*, 4(4). <https://doi.org/10.1186/s40639-017-0033-3>
- Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). London: Routledge.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed.). New York: The Guilford Press.
- Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology*, 1, 293–319. <https://doi.org/10.1146/annurev.clinpsy.1.102803.143938>.
- Hermanto, N., Zuroff, D. C., Kopala-Sibley, D. C., Kelly, A. C., Matos, M., Gilbert, P., et al. (2016). Ability to receive compassion from others buffers the depressogenic effect of self-criticism: A cross-cultural multi-study analysis. *Personality and Individual Differences*, 98, 324–332. <https://doi.org/10.1016/j.paid.2016.04.055>.
- Kearns, A., Whitley, E., Tannahill, C., & Ellaway, A. (2015). Loneliness, social relations and health and well-being in deprived communities. *Psychology, Health & Medicine*, 20(3), 332–344. <https://doi.org/10.1080/13548506.2014.940354>.
- Kessing, L. V., Agerbo, E., & Mortensen, P. B. (2003). Does the impact of major stressful life events on the risk of developing depression change throughout life? *Psychological Medicine*, 33(7), 1177–1184. <https://doi.org/10.1017/S0033291703007852>.
- Kessler, R. C. (1997). The effects of stressful life events on depression. *Annual Review of Psychology*, 48, 191–214. <https://doi.org/10.1146/annurev.psych.48.1.191>.
- Kline, R. (2005). *Principals and practice of structural equation modeling* (2nd ed.). New York: Guilford Press.
- Kline, R. B. (2000). *The handbook of psychological testing* (2nd ed.). London: Routledge.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92(5), 887–904. <https://doi.org/10.1037/0022-3514.92.5.887>.
- Lickel, B., Kushlev, K., Savalei, V., Matta, S., & Schmader, T. (2014). Shame and the motivation to change the self. *Emotion*, 14(6), 1049–1061. <https://doi.org/10.1037/a0038235>.
- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis on differences between cognitive and affective well-being. *Journal of Personality and Social Psychology*, 102(3), 592–615. <https://doi.org/10.1037/a0025948>.
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32(6), 545–552. <https://doi.org/10.1016/j.cpr.2012.06.003>.
- Matos, M., Duarte, J., & Pinto-Gouveia, J. (2017). Being afraid of compassion: Fears of compassion as mediators between early emotional memories and psychopathological symptoms in adulthood. *European Psychiatry*. <https://doi.org/10.1016/j.eurpsy.2017.01.312>.
- Matos, M., Pinto-Gouveia, J., Gilbert, P., Duarte, C., & Figueiredo, C. (2015). The other as shamer scale—2: Development and validation of a short version of a measure of external shame. *Personality and Individual Differences*, 74, 6–11. <https://doi.org/10.1016/j.paid.2014.09.037>.
- McKnight, C. G., Huebner, E. S., & Suldo, S. M. (2002). Relationships among stressful life events, temperament, problem behavior, and global life satisfaction in adolescents. *Psychology in the Schools*, 39(6), 677–687. <https://doi.org/10.1002/pits.10062>.
- Mundt, C., Reck, C., Backenstrass, M., Kronmüller, K., & Fiedlerb, P. (2000). Reconfirming the role of life events for the timing of depressive episodes. A two year prospective follow-up study. *Journal of Affective Disorders*, 59(1), 23–30. [https://doi.org/10.1016/S0165-0327\(99\)00127-5](https://doi.org/10.1016/S0165-0327(99)00127-5).
- Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85–101. <https://doi.org/10.1080/15298860309032>.
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41, 908–916. <https://doi.org/10.1016/j.jrp.2006.08.002>.
- Neff, K. D., & Dahm, K. A. (2015). Self-compassion: What it is, what it does, and how it relates to mindfulness. In M. Robinson, B. Meier, & B. Ostafin (Eds.), *Handbook of mindfulness and self-regulation*. New York: Springer.
- Neff, K., & Tirch, D. (2013). Self-compassion and ACT. In T. Kashdan & J. Ciarrochi (Eds.), *Mindfulness, acceptance, and positive psychology: The seven foundations of well-being* (pp. 78–106). Oakland, CA: Context Press/New Harbinger Publications.
- Nuske, E. M., Holdsworth, L., & Breen, H. (2016). Significant life events and social connectedness in Australian women's gambling experiences. *Nordic Studies on Alcohol and Drugs*, 33, 1. <https://doi.org/10.1515/nsad-2015-0043>.
- Pace, T. W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., et al. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology*, 34(1), 87–98. <https://doi.org/10.1016/j.psyneuen.2008.08.011>.
- Paykel, E. S. (2003). Life events and affective disorders. *Acta Psychiatrica Scandinavica*, 108(Suppl. 418), 61–66. <https://doi.org/10.1034/j.1600-0447.108.s418.13.x>.
- Phillips, A. C., Carroll, D., & Der, G. (2015). Negative life events and symptoms of depression and anxiety: Stress causation and/or stress generation. *Anxiety Stress and Coping*, 28(4), 357–371. <https://doi.org/10.1080/10615806.2015.1005078>.
- Pinto-Gouveia, J., Duarte, C., Matos, M., & Fráguas, S. (2014). The protective role of self-compassion in relation to psychopathology symptoms and quality of life in chronic and in cancer patients. *Clinical Psychology & Psychotherapy*, 21, 311–323. <https://doi.org/10.1002/cpp.1838>.
- Pocnet, C., Antonietti, J. P., Strippoli, M. P. F., Glaus, J., Preisig, M., & Rossier, J. (2016). Individuals' quality of life linked to major life events, perceived social support, and personality traits. *Quality of Life Research*, 25(11), 2897–2908. <https://doi.org/10.1007/s11136-016-1296-4>.
- Rubenstein, L. M., Freed, R. D., Shapero, B. G., Fauber, R. L., & Alloy, L. B. (2016). Cognitive attributions in depression: Bridging the gap between research and clinical practice. *Journal of Psychotherapy Integration*, 26(2), 103–115. <https://doi.org/10.1037/int0000030>.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.

- Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a Randomized Trial. *International Journal of Stress Management*, *12*(2), 164–176. <https://doi.org/10.1037/1072-5245.12.2.164>.
- Silva, C., Ferreira, C., Mendes, A. L., & Marta-Simões, J. (2018). The relation of early positive emotional memories to women's social safeness: The role of shame and fear of receiving compassion. *Women & Health*. <https://doi.org/10.1080/03630242.2018.1487906>.
- Tangney, J., & Dearing, R. (2002). *Emotions and social behavior. Shame and guilt*. New York: Guilford Press.
- Tennant, C. (2002). Life events, stress and depression: A review of recent findings. *Australian and New Zealand Journal of Psychiatry*, *36*(2), 173–182. <https://doi.org/10.1046/j.1440-1614.2002.01007.x>.
- Trindade, I. A., & Ferreira, C. (2017). *Major Life Events Questionnaire*. Non-published questionnaire.
- Velotti, P., Garofalo, C., Bottazzi, F., & Caretti, V. (2017). Faces of shame: Implications for self-esteem, emotion regulation, aggression, and well-being. *The Journal of Psychology*, *151*(2), 171–184. <https://doi.org/10.1080/00223980.2016.1248809>.
- Wanic, R., & Kulik, J. (2011). Toward an understanding of gender differences in the impact of marital conflict on health. *Sex Roles*, *65*(5), 297–312. <https://doi.org/10.1007/s11199-011-9968-6>.
- Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, *55*(2), 209–223. <https://doi.org/10.2307/2095627>.
- Wheaton, B. (1999). The nature of stressors. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 176–197). New York: Cambridge University Press.
- WHOQOL Group. (1998). The World Health Organization Quality of Life Assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine*, *46*, 1569–1585. [https://doi.org/10.1016/S0277-9536\(98\)00009-4](https://doi.org/10.1016/S0277-9536(98)00009-4).
- Zhang, H., Carr, E. R., Garcia-Williams, A. G., Siegelman, A. E., Berke, D., Niles-Carnes, L. V., et al. (2018). Shame and depressive symptoms: Self-compassion and contingent self-worth as mediators? *Journal of Clinical Psychology in Medical Settings*, *25*(4), 408–419. <https://doi.org/10.1007/s10880-018-9548-9>.

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