Optimism in prolonged grief and depression following loss: A three-wave longitudinal study

Paul A. Boelen

Department of Clinical and Health Psychology, Utrecht University, PO Box 80140, 3508 TC Utrecht, The Netherlands

ARTICLE INFO

ABSTRACT

There is considerable evidence that optimism, the predisposition to have generalized favorable expectancies for the future, is associated with numerous desirable outcomes. Few studies have examined the association of optimism with emotional distress following the death of a loved one. Doing so is important, because optimism may be an important target for interventions for post-loss psychopathology. In the current study, we examined the degree to which optimism, assessed in the first year post-loss (Time 1, T1), was associated with symptom levels of prolonged grief and depression six months (Time 2, T2) and fifteen months (Time 3, T3) later, controlling for baseline symptoms and also taking into account positive automatic cognitions at T1. Findings showed that higher optimism at T1 was associated with lower concurrent prolonged grief and depression severity. Higher optimism at T1 was also inversely related with depression symptom severity at T2 and T3, but not prolonged grief severity at T2 and T3. Implications of these findings are discussed.

© 2015 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Optimism refers to "an individual difference variable that reflects the extent to which people hold generalized favorable expectancies for their future" (Carver et al., 2010). Optimism is considered a trait, relatively stable over time; yet, variations in optimism (over briefer and longer periods) have been documented and there is some evidence that optimism is amenable to change via cognitive behavioral interventions (Carver et al., 2010). There is considerable evidence that optimism has desirable consequences; it is associated with faster recovery from illness (Carver et al., 2003), lower mortality in old age (Giltay et al., 2004), and has protective effects following exposure to mild (Chang and Sanna, 2003) and severe (Britt et al., 2011; Kivimäki et al., 2005) stressful life events.

Few studies have explored the role of optimism in psychological functioning following the death of a loved one, most of them indicating that optimism has a protective impact. Specifically, Rogers et al. (2005) found that optimism was associated with constructive coping among people who lost a loved to HIV/AIDS. Ai et al. (2006) found personal loss in the 9/11 attacks to be associated with more severe posttraumatic stress disorder (PTSD) symptoms among individuals low in dispositional optimism, but not those who scored high on optimism. Harper et al. (2013) found optimism to be concurrently associated with less severe

complicated grief reactions among parents who lost a child. Wagner et al. (2007) examined optimism as an outcome of online therapy for complicated grief; somewhat in contrast with the aforementioned findings, they did not find evidence that baseline optimism was associated with greater reduction in symptoms over time. In fact, unexpectedly, baseline optimism was significantly associated with a weaker reduction in symptoms of avoidance (and unrelated with other symptoms, including intrusive symptoms, depression, and generalized anxiety).

None of these studies have investigated to what extent optimism is a prospective predictor of lower emotional distress following loss. Studying this issue is important because it enhances our understanding of underlying mechanisms of distress following loss and informs us about the potential usefulness of trying to enhance optimism in the treatment of disturbed grief. The present study—conducted in The Netherlands—used a prospective design to study the association of optimism with symptoms of Prolonged Grief Disorder (PGD) and depression, representing the two most prevalent and debilitating psychological syndromes that may occur following bereavement (Maercker et al., 2013). PGD—criteria of which were proposed and tested by Prigerson et al., 2009—is a clinical condition including persistent separation distress and difficulties accepting the loss and moving on without the lost person causing significant distress and disability, at least 6 months following the loss. PGD symptoms are distinct from, yet correlated with loss-related depression. Provisional epidemiological studies suggest that PGD occurs in 10–20% of bereaved individuals (Shear, 2015). PGD will likely be included

E-mail address: P.A.Boelen@uu.nl

in the forthcoming revision of the International Classification of Diseases and Related Health Problems (ICD-11) and resembles the condition "Persistent Complex Bereavement Disorder (PCBD)" included in the appendix of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), as a condition requiring further research (Maercker et al., 2013). In a three-wave study, we examined the degree to which optimism, assessed in the first year post-loss (Time 1, T1), was associated with symptom levels of PGD and depression six months later (Time 2, T2), and fifteen months (Time 3, T3) later, controlling for baseline symptoms. At T1, we also assessed current positive automatic cognitions using the Automatic Thoughts Questionnaire-Positive version (ATQ-P; Ingram and Wisnicki 1988). The ATQ-P taps the frequency of self-referent positively valenced cognitions during the past week, reflecting state-like fluctuations in positive thinking (Dozois, 2007). We considered current positive automatic cognitions to elucidate the relative importance of optimism as trait-like positive future thinking versus more transient state-like positive thinking in predicting distress. Based on prior evidence that optimism buffers the impact of stressful events, we predicted that higher dispositional optimism in the first year of bereavement would be associated with lower PGD symptom severity and depression symptom severity, concurrently and prospectively.

2. Method

2.1. Participants and procedure

We used data from two samples of bereaved individuals originally recruited for a research program on cognitive variables in grief. Participants completed questionnaires at inclusion into the program. Individuals bereaved < 1 year ago at inclusion (T1) were invited to complete questionnaires again six months after T1 (at T2) and again 15 months after T1 (at T3). A first sample was recruited via mental health care workers (including social workers, grief counselors, psychotherapists, clergy) who came in contact with bereaved individuals through their work-related or voluntary activities; health care workers were instructed to distribute at much questionnaire packets as they could, resulting in 1128 questionnaire being handed out to bereaved people, 492 (43.6%) of which were returned. A second group was recruited through announcements on the Internet that briefly described goals of the research program on cognitive variables and invited bereaved individuals to participate in a survey study; people interested could immediately complete questionnaires online or—if so wished—ask for paper questionnaires to be sent to their homes. Data for the current study were gathered from those who chose the latter option; 490 questionnaires were sent and 260 (53%) were returned. Written informed consent was obtained from all participants.

Included in the current study were participants who were at least 18 years of age and who lost a loved one within the previous 12 months. At T1, $N=230$ bereaved individuals were included, $n=111$ recruited from caretakers and $n=119$ recruited via the Internet. There were differences in kinship, with the caretaker-subsample including more bereaved partners and the internet-subsample including more bereaved adult children; in addition, those in the former group were older, slightly further removed from their loss, and with less years of education, and had higher scores on the ATQ-P (all $p < 0.01$). However, groups did not differ in gender and cause of loss, symptom levels of PGD and depression, and optimism at T1 (all p's > 0.14). Therefore, it was considered acceptable to combine groups for this study.[1]

The sample at T1 ($N=230$) had a mean age of 44.8 (S.D.=16.7) years, the mean length of education was 15.3 (S.D.=3.2) years, and 78.3% were female.[2] The average time since loss was 6.6 (S.D.=3.5) months; 116 participants (50.4%) lost a partner/ spouse, 25 (10.9%) a child, and 89 (38.7%) a relative other than a partner/spouse or child. Losses were due to a natural cause in 196 (85.2%) cases and an unnatural cause (suicide, homicide, or accident) in 34 (14.8%) cases. Those who continued to

participate at T2 ($N=159$) did not differ from those who did not ($N=71$) on any of the variables that were assessed at T1, except that "stayers" had higher scores on the Automatic Thoughts Questionnaire-Positive version (ATQ-P; $p < 0.02$). Those who continued to participate at T3 ($N=136$) did not differ from those who did not ($N=94$) on any of the variables that were assessed at T1, except that "stayers" had higher ATQ-P scores ($p < 0.05$).

2.2. Measures

Prolonged Grief symptom-severity was assessed using 19 items from the Inventory of Complicated Grief (ICG) representing all proposed criteria for Prolonged Grief Disorder (Boelen et al., 2003; Prigerson et al., 1995, 2009) and other markers of disturbed grief (e.g., "Memories of the lost person upset me"). Items are scored on 5-point scales (0=*never*; 4=*all the time*). The ICG has good psychometric properties; a score of > 25 has been used as being indicative of PGD "caseness" (Prigerson et al., 1995). The α's in this sample were .89 (T1), .84 (T2), and .92 (T3).

Depression symptom-severity was assessed using the Depression-subscale of the Symptom Checklist (SCL-90) (Derogatis, 1983). This scale instructs respondents to rate the presence of 16 symptoms (e.g., "Feeling no interest in things") during the preceding week, on 5-point scales (1=*not at all*; 5=*very much*). The measure has good psychometric properties (Derogatis, 1983). The α's were .92 (T1) and .93 (T2 and T3).

Positive Automatic Cognitions were assessed using the Automatic Thoughts Questionnaire-Positive version (ATQ-P; Ingram and Wisnicki, 1988). This measure instructs respondents to rate how often that had each of 30 positive cognitions during the past week on 5-point scales (1=*never*; 5=*all the time*). The measure has good psychometric properties (Ingram and Wisnicki, 1988). In the current study the α was .95 (T1).

Optimism was assessed with the Life Orientation Test (LOT; Scheier and Carver, 1985). The LOT instructs respondents to indicate their level of agreement with 12 items (8 representing optimism, 4 filler-items) on 5-point scales (0=*strongly disagree*; 4=*strongly agree*). The LOT has good psychometric properties (Carver et al., 2010). In the current study the α was .82.

3. Results

3.1. Symptom severity scores

Mean scores on the ICG were: T1, $M=31.5$ (S.D.=12.5), T2, $M=27.0$ (S.D.=12.4), and, T3, $M=24.4$ (S.D.=13.3). Scores declined significantly over time ($F(2, 134)=33.61$, $p < 0.001$), with significant differences both between T1 and T2 ($p < 0.001$) and between T2 and T3 ($p < 0.01$). Mean scores on the SCL-depression scale were: T1, $M=39.3$ (S.D.=13.7), T2, $M=35.2$ (S.D.=12.8), and, T3, $M=32.8$ (S.D.=13.4). Scores declined significantly over time ($F(2, 134)=33.61$, $p < 0.001$), with significant changes between T1 and T2 ($p < 0.001$) and a trend toward a significant decline between T2 and T3 ($p=0.07$). At T1, T2, and T3, 67.4%, 46.5%, and 41.9%, of all participants, respectively, had a > 25 score on the ICG which is indicative of PGD "caseness" (Prigerson et al., 1995).[3]

3.2. Variation in symptom severity as a function of demographic and loss-related variables

We examined to what extent PGD and depression symptom severity scores at T1, T2, and T3 differed as a function of socio-demographic variables (i.e., age, gender, number of years of education) and loss-related variables (i.e., time since loss, relationship to the deceased, cause of loss). Because we wished to control for relevant background variables (the ones associated with symptom scores) in our subsequent regression analyses, we aimed to reduce Type II error and did not control for alpha inflation. Age was inversely associated with T1 PGD severity ($r= -0.14$, $p < 0.05$) and T1 depression severity

---

[1] That sample source had no impact on the findings was confirmed by the fact that outcomes of all regression analyses reported below were mostly similar when sample source was included as a control variable. That is, including sample source as a control variable did not change which independent variables emerged as significant or non-significant predictors of PGD-symptoms and depression-symptoms at T1, T2, and T3.

[2] Women were overrepresented in this study; however, gender was unrelated to PGD symptoms and depression symptoms at T1, T2, and T3 (as reported below) and unrelated to optimism at T1 ($p=0.39$). Therefore, it was unlikely that gender qualified the associations between optimism and outcomes reported below.

[3] Notably, this number only provides an indication of PGD "caseness" because data were based on self-report, functional impairment associated with the grief-reactions was not systematically assessed, and not all these participant were beyond the 6 months time threshold required for a diagnosis of PGD (Prigerson et al., 2009); moreover, given that all participants were in the first year of bereavement at T1, none qualified for a diagnosis of PCBD as described in DSM-5 because PCDB-criteria require symptoms to be present at least 12 months beyond the loss.