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ORIGINAL RESEARCH

Self-Rated Health among Unemployed Adults: the Role of Quiet Ego, Self-Compassion, and Post-Traumatic Growth

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Abstract

Unemployment can be associated with negative psychological and physical health outcomes when it undermines an individual's sense of self-worth and confidence. This study examined whether quiet ego, a self-identity motivated by a compassionate stance toward the self and others would be positively associated with self-reported health. Further, we expected this relationship to be mediated by two types of psychological capital: self-compassion, the ability to show kindness and understanding to one's self during times of disappointment, and post-traumatic growth (PTG), the ability to derive a sense of meaning from adverse experiences. We also expected self-compassion and PTG to be associated with a robust measure of self-rated health. We tested a double mediation model in a sample of adults recruited from an employment center at the height of the Great Recession in 2010 ($N = 173$) and were also able to make some limited comparisons with a sample of employed adults ($N = 60$). For unemployed adults, quiet ego was associated with PTG. Quiet ego was positively related to self-rated health, mediated by self-compassion, for unemployed and employed adults.

Keywords Unemployment · Quiet ego · Self-compassion, post-traumatic growth · Health

The health and well-being of working adults may be compromised during periods of unemployment (Fryer and Payne 1986). The financial hardship that accompanies unemployment can have profound negative consequences for psychological well-being (Creed and Klisch 2005; Lynch et al. 1997; Paul and Moser 2009) and physical health (Grossi et al. 2001; Roelfs et al. 2011). Unemployment is a major focus in the

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public health domain because it is "one of the factors affecting the complex interrelationships of lifestyles, working and living conditions that determine population health" (Hollederer 2015, p. 319). There has been substantial research on unemployment's association with physical health, including increased mortality, illness, psychosomatic symptoms, and lower self-rated health (e.g., Åslund et al. 2014; Böckerman and Ilmakunnas 2009; Hergenrather et al. 2015; McKee-Ryan et al. 2005; but see also Schmitz 2011). Loss of employment is associated with increased mortality after controlling for relevant background variables, even for individuals who are otherwise relatively advantaged and healthy (Morris et al. 1994) and regardless of the level of social welfare or protection available (Bambra and Eikemo 2008).

Several theorists have argued that the negative impact of unemployment on psychological well-being and health can be attributed to the fact that losing a job can diminish a person's sense of self-worth (Fryer 1986; Paul and Moser 2009; Price et al. 2002; Ullah 1990; Rantakeisu et al. 1999). We propose that the abilities to extend compassion to oneself and find meaning during unemployment are important psychosocial resources that may mitigate a loss of self-worth in the face of unemployment. Thus, the goal of the current research is to examine whether psychological constructs that reflect a capacity for compassion and growth are positively associated with self-rated health among unemployed adults. Specifically, we introduce the concept of the quiet ego, a compassionate self-identity that reflects a motivation to balance self- and other-concern. We hypothesize that quiet ego is associated with better self-rated health among the unemployed because it facilitates two types of psychological resources: self-compassion and post-traumatic growth (see Fig. 1 for theoretical model). We use a one-item self-rating of health that has been used by the CDC (1995) and is considered a robust predictor of mortality (e.g., Barger et al. 2016; DeSalvo et al. 2005).

Quiet Ego: A Motivational Stance for Balance and Growth

Although the quiet ego is a relatively new construct in the positive psychology literature, its theoretical roots are not new. Rather, the quiet ego is grounded in the tenets of humanistic psychology and eudaimonic philosophical perspectives (Bauer and Wayment 2008; Wayment and Bauer 2017). The quiet ego functions not as a broad trait

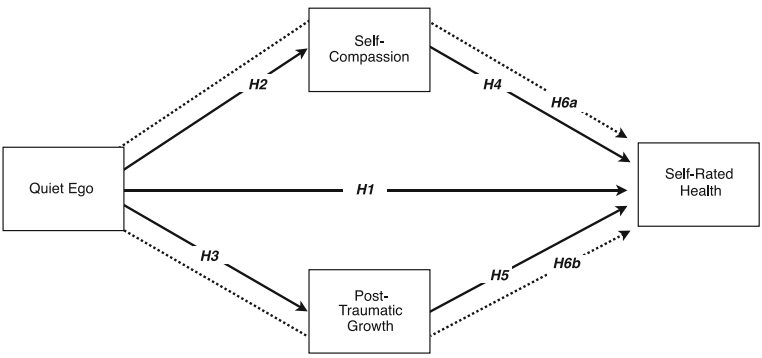

Fig. 1 *Hypothesized Mediator Model (Hayes model 4 with two mediator variables).* Solid lines depict direct effects. Dashed lines depict indirect effects

but as a characteristic adaptation (McAdams 1995), a domain of personality that focuses on values and motives. The quiet ego orients and motivates the person from a particular set of perspectives on the self and others (Wayment and Bauer 2017) and reflects endorsement of four values: Detached awareness (desire to attend to situations without judgment coupled with self-reflection), inclusive identity (sense of connection with others and all living things), perspective-taking (acknowledgment that there are multiple points of view), and growth-mindedness (motivation to learn from one's mistakes for longer-term development). The quiet ego describes a person's motivational readiness to think, feel, and behave in ways that reflect an orientation toward balance and growth (Bauer and Wayment 2008; Wayment et al. 2015a; Wayment and Bauer 2017).

Quiet ego is associated with psychological resources related to employee success in challenging workplace circumstances. For example, positive psychological workplace resources are described as personal characteristics that provide people with a sense of control over their environment and resilience in the face of adversity (Luthans et al. 2007; Xanthopoulou et al. 2007). Similarly, psychological capital (PsyCap) is a higher order construct consisting of positive personal resources such as self-efficacy, optimism, hope, and resilience. Previous research has shown that quiet ego is associated with several of these personal resources such as less negative thinking, effective coping, resilience, conscientiousness, and self-efficacy (Wayment et al. 2015a, b, 2011). Since these types of personal resources have been shown to be related to psychological and physical health when coping with stressful events (Harms et al. 2017), we expected that quiet ego would be related to better health outcomes among unemployed adults.

Quiet ego is not only associated with PsyCap and other positive psychology constructs, but also with personal resources that reflect a concern for others. Quiet ego is related to an ability to balance self- and other-concern and this balance is associated with enhanced self-control (Wayment et al. 2016; Wayment and Cavolo 2018), an important predictor of objective physical health (Sutin et al. 2018). Indeed, previous research has found correlations between quiet ego and self-rated health in Buddhist practitioners (Wayment et al. 2011), as well as life satisfaction (Wayment et al. 2016), perceived and biological stress (Wayment and Cavolo 2018; Wayment et al. 2015a, b), and adaptive immune parameters (Collier et al. 2016) in college students.

We predict that quiet ego will be positively associated with self-rated health in the context of a significant life stressor: unemployment. Further, we argue that the relationship between quiet ego and self-rated health is at least partially explained by two types of positive psychological resources that reflect compassion and growth and are likely to combat the lack of self-worth that often accompanies unemployment: self-compassion and post-traumatic growth. Quiet ego has been shown to be positively related with both constructs in previous research (Wayment et al. 2015a, b, 2018). Next, we explain in more detail the mechanisms by which these psychosocial resources promote health.

Self-Compassion

Self-compassion is an ability to extend kindness and understanding to the self during setbacks (Neff 2003, 2008). Self-compassion involves recognizing that unwanted

outcomes, such as unemployment, are a common part of the human experience. Self-compassion is associated with skills that should positively affect health, such as adaptive coping styles, improved self-regulation, fewer judgmental and defensive thoughts, and effective goal monitoring (Allen and Leary 2010; Sirois et al. 2015; Terry and Leary 2011). Self-compassion is associated with several important markers of physical health including reduced stress (Breines et al. 2015), health promoting behavior (Dunne et al. 2016; Terry et al. 2013), psychological functioning (Thompson and Waltz 2008; Zeller et al. 2015) and physical health (Hall et al. 2013). There is evidence that the relationship between self-compassion and physical health is mediated by lower levels of perceived stress and greater use of health-promoting behaviors (Homan and Sirois 2017). Additionally, previous research has found a relationship between quiet ego, self-compassion, and less perceived stress (Wayment et al. 2016). Therefore, we predicted that among unemployed adults, quiet ego would be positively associated with self-compassion, and that self-compassion would mediate the relationship between quiet ego and health.

Post-Traumatic Growth

Post-traumatic growth (PTG) has been defined as an ability to persevere in the face of adversity and is facilitated by the use of positive psychosocial resources, such as beliefs that life is comprehensible, manageable, and meaningful (Antonovsky 1987; McKee-Ryan et al. 2005). Tedeschi and Calhoun (1996) have identified five dimensions of PTG: more positive self-views, a changed perspective about life, spiritual changes, improved relationships with others, and appreciation of life. PTG is most likely to occur in contexts that challenge an individual's assumptive worldview (Janoff-Bulman 1992; Park et al. 2010; Tedeschi and Calhoun 1996). Unemployment, to the extent that it is challenging and disruptive, is a type of event that could trigger a reprioritization of goals and search for meaning (Cadell et al. 2003; Peterson et al. 2008; Tedeschi and Calhoun 1996; Zoellner and Maercker 2006). Although job loss and unemployment could present opportunities for PTG, little research has examined PTG in unemployed individuals (Moran et al. 2013; Teodorescu et al. 2012). Further, no research has examined the relationship between PTG and health in unemployed adults.

Research documenting the relationship between PTG and psychological and physical health is mixed. A meta-analysis of 87 cross-sectional studies found that PTG is consistently associated with lower depression and greater well-being, but unrelated to anxiety, global distress, quality of life, and subjective physical health (Helgeson et al. 2006). Other studies have shown that post-traumatic growth is positively associated with cortisol reduction in cancer patients (Cruess et al. 2000), positive immunological health outcomes (Bower et al. 1998), and reduced morbidity after experiencing a heart attack (Affleck et al. 1987). Possible moderating influences on the relationship between PTG and health include the type of stressors, amount of time that has passed since the traumatic event, racial composition of the sample, and the study design (Helgeson et al. 2006; Barskova and Oesterreich 2009). The mechanisms by which PTG is positively related to health are positive mood, awareness of emotional states, positive coping mechanisms, cognitive reframing, and the ability to live in the moment, all of which are also associated with a quiet ego (Powell et al. 2012; Tedeschi and Calhoun 2004; Westphal and Bonanno 2007; Wayment et al. 2015a, b). Thus, we predicted that among

unemployed adults, quiet ego would be positively associated with PTG, and PTG would mediate the relationship between quiet ego and health.

Study Goals

Organizational researchers are increasingly recognizing the value of positive psychological constructs both within and beyond the workplace (e.g., Youssef-Morgan and Luthans 2015). Although unemployment affects millions of adults each year and can adversely impact adults' health (McKee-Ryan et al. 2005), relatively few studies have examined positive psychosocial resources and health in the context of unemployment (Lim et al. 2016; Rani 2015; Sabaitytė and Diržytė 2016). We argue that positive psychosocial resources are important because they could reduce the adverse impact associated with the loss of self-worth that often accompanies unemployment (Fryer 1986; Price et al. 2002). In this study, we focus on quiet ego, which should facilitate people's abilities to extend compassion toward themselves (i.e., self-compassion) and find positive meaning in adversity (i.e., PTG) in ways that could mitigate the self-evaluative threat that often accompanies unemployment (Fryer 1986). By positing self-compassion and PTG as mechanisms through which quiet ego is associated with self-rated health, this study aims to identify mediators which are needed to help explain the relationship between positive personal resources and positive outcomes (Newman et al. 2014).

Our predictions are depicted in Fig. 1. Among unemployed adults, we hypothesized that quiet ego characteristics would be related to self-rated health (H1). Specifically, we predicted that among unemployed adults, quiet ego would be positively associated with self-compassion (H2) and PTG (H3), and that self-compassion and PTG would in turn be positively associated with self-rated health (H4 and H5, respectively). We also expected that self-compassion (H6a) and PTG (H6b) would mediate the relationship between quiet ego and self-rated health.

Method

Participants and Procedure

Participants in this study were unemployed at the height of the Great Recession in the summer of 2010. Surveys were distributed to participants at one of several state-run job and unemployment centers in Arizona. These centers provide individuals with a variety of resources related to employment (e.g., unemployment benefits, training, rehabilitation). For three days during the summer of 2010, our research team set up a table in the entryway providing participants an opportunity to complete a survey at the site. Participants were given $10 as compensation. The survey contained items assessing demographics, employment status, and work history, as well as 11 psychosocial measures, including five used for the current study. A previously published study utilized four of the other measures (not including demographic and work history items). A total of 261 individuals returned surveys: Unemployed ($n = 180$), employed ($n = 41$), underemployed ($n = 19$) and not employed by choice ($n = 21$). Data used in this study are

stored in a data repository, but not publicly accessible.[1] Our analyses focused on unemployed adults. Data were missing for seven participants who were subsequently dropped from the analyses, resulting in a final sample size of 173 (62% female, 38% male). Participants' mean length of unemployment was 14.54 months ($SD = 18.14$). Participants' mean age was 37.42 ($SD = 12.90$ years). Approximately 70% of the respondents identified as White ($n = 82$), 23% as Hispanic ($n = 40$), and 20% as Black ($n = 35$). The remaining 10% participants reported being Asian ($n = 2$), Native American ($n = 13$), or did not provide information ($n = 1$). Participants could select more than one category.

Measures

Quiet Ego Characteristics We used a 4-item quiet ego scale, with one item representing each of four quiet ego characteristics: detached self-awareness, inclusive identity, perspective-taking, and growth ("When I am participating in an activity, I tend to get so involved that I lose track of time" [reversed], "I feel a sense of connection with all living things," "I am very interested in understanding other people's perspectives even if they differ from my own," and "All in all, I think that I have a balanced view of myself"). All items were rated on a 5-point scale (1 = strongly disagree; 5 = strongly agree). The items were averaged to create a scale with adequate reliability (alpha = .78). Higher scores reflected stronger identification with quiet ego characteristics. Although the full 14-item measure was published after data for this study were collected, our four-item performed adequately and similarly to the 14-item scale.[2]

Self-Compassion Respondents completed the positively worded items from the short form of the Self-Compassion Scale (Raes et al. 2011). Examples include "I try to be understanding and patient towards those aspects of my personality I don't like" and "When I'm going through a very hard time, I give myself the caring and tenderness I need". These five items were rated on a 5-point scale (1 = almost never; 5 = almost always). The items were averaged to create a scale with adequate reliability (alpha = .84). Higher scores reflected greater self-compassion.[3] The Self-Compassion Scale is a valid and theoretically coherent measure of self-compassion (Neff 2015).

[1] We will supply the data for the entire data set for any researcher who is interested. Please contact the first author: [deleted for blind review].

[2] Our four-item quiet ego scale was part of preliminary work on quiet ego scale development that occurred prior to the publication of the Quiet Ego Scale (QES; Wayment et al. 2015a). Three of the four items are nearly identical to items found in the published scale. In a sample of 1117 undergraduates, the total 14-item scale correlated .73 with the same subset of three items we used in this study. Our fourth item was included because it reflected an important characteristic (balance) associated with the QES (Wayment and Bauer 2017). Our four-item quiet ego scale correlated.47 with our measure of PTG. In a recent study of mothers raising a child with Autistic Spectrum Disorder, we found a similar correlation between the 14-item quiet ego scale and same PTG scale ($r(364) = .37$ and ß = .34, after controlling for child and mother characteristics, ruminative thought, time since ASD diagnosis and social support (Wayment et al. 2018).

[3] We used all of the positively-worded items from the Raes et al. (2011) short form of the Self-Compassion Scale, inadvertently omitting one positively worded item (item 10). In a sample of college students ($N = 1117$), we computed the reliability of these 5 items (.77) and found it correlated highly with the full 12-item measure ($r = .78$). We correlated both self-compassion measures (our 5-item measure and the 12-item measure) with college life satisfaction, self-efficacy, and grit and found them to have comparable relationships (.34/.45, .48/.40, and.27/.32, respectively).

Post-Traumatic Growth We used the short form of the Posttraumatic Growth Inventory (Vishnevsky et al. 2010; based on the long form PTGI, Tedeschi and Calhoun 1996). Respondents were first asked to describe any economic hardships they were experiencing in the context of the recent economic downturn. The prompt of the open-ended question states: "Please describe the economic hardship you have experienced during this current recession. While many individuals have lost their own jobs, others have experienced the unemployment of a spouse. There are also issues of underemployment such as receiving pay freezes, reductions in pay, or working fewer hours. Others have been required to financially help others such as friends or family members. Remember, no hardship is considered too small or too big to describe here. If you have not experienced any economic hardships, please describe your most stressful experience during the past 12 months." We analyzed the content of these responses (see Results). Then, reflecting on those economic stressors, participants rated 12 items using a 6-point scale (0 = I did not experience this change; 5 = experienced change to a great degree). The scale items reflect five types of growth: increased appreciation of life; sense of new possibilities in life; increased personal strength; improvement in close personal relationships; and positive spiritual change. One item, "I have a better understanding of spiritual matters" was accidentally omitted from the questionnaire. Nine items were summed to form a single scale entitled "post-traumatic growth." The coefficient alpha for this scale was.88. Higher scores indicated greater PTG. This scale has shown to have good internal consistency, acceptable test-retest reliability, and good validity (Tedeschi and Calhoun 1996).

Self-Rated Health Self-rated health was assessed by the question, "Would you say your health in general is excellent, very good, good, fair or poor?" (Idler and Benyamini 1997). We chose this item because of its importance in population health surveillance as a robust predictor of mortality (DeSalvo et al. 2005). This single-item measure is considered a valid measure of health, provides prognostic information beyond that captured by traditional risk assessments, is used universally in health-related research, is sensitive to health changes, predicts important health outcomes across socioeconomic status levels, and is central to health surveillance efforts around the world (Barger et al. 2016). We selected this measure due to its efficiency and effectiveness for predicting general health. We reversed the scoring so that higher scores indicated better self-rated health.

Results

Preliminary Analyses

For all study variables, univariate indices of skewness and kurtosis were normal (skewness ranged between −.46 to 1.54; kurtosis ranged between −.91 and 2.04). To examine whether our study variables were distinct and the extent to which their relationships were affected by common method bias, we conducted two analyses. Using EQS (Bentler 1995), we conducted a confirmatory factor analysis (CFA), with a latent factor for each variable created from scale items, the variance of each latent

factor was fixed at 1.0, with items allowed to load freely onto their respective factors. The three factors were quiet ego (each item was an indicator, for four indicators), self-compassion (five indicators), and PTG (nine items randomly divided into three 3-item indicators). We also allowed the three factors to correlate without allowing any of the indicator error terms to correlate (either within-factor or across factors; Hooper et al. 2008). Multiple global fit indices were used including the traditional overall chi square test of model fit, the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Bentler-Bonett non-normed fit index (NNFI), a favorable X^2:df ratio (3 or less), and the standardized root mean square residual (SRMR) (Bollen and Long 1993; Kline 2011). The three-factor CFA provided a good fit to the data, χ^2 (32) = 59.75, $p = .002$, χ^2:df = 1.87, CFI = .96, NNFI = .94, SRMR = .06, RMSEA = .07, 90% CI [.04, .10]. The factor loadings of the 12 indicators onto their respective factors were significant at $p < .0001$. The average absolute standard residual was.04, and the average off-diagonal absolute standardized residual was.05. The three factors were also significantly correlated with one another, and in expected directions.

We compared the three-factor model with a one-factor solution (with all 12 indicators loading onto 1 factor) that would suggest common method bias. The one-factor CFA did not provide an acceptable fit to the data, χ^2 (35) = 264.04, $p < .001$, χ^2:df = 7.54, CFI = .63, NNFI = .53, SRMR = .12, RMSEA = .20, 90% CI [.17, .22]. The average absolute standard residual was.09, and the average off-diagonal absolute standardized residual was.11. The chi-square difference test suggested that the three-factor model provided a significantly better fit to our data than the one factor model, χ^2 (3) = 204.29, $p < .001$. Our results indicated that our variables were sufficiently distinct. Next, to assess common method bias we followed a comprehensive CFA marker technique outlined by Williams et al. (2010). As recommended, we selected a marker latent variable expected to be orthogonally related to our measures of interest, but also one that taps into one or more of the sources of bias that can occur in the measurement context of our study. Thus, we chose a scale we measured but were not using for this study: personal need for structure (PNS). This measure assesses an individual's comfort with disorganization, disorder, and uncertainty. PNS correlated.10 with quiet ego, .08 with self-compassion, and.02 with PTG (also −.11 with self-rated health). Indicators of our three latent variables were minimally affected by common method bias (6%), and the correlations among our three primary latent variables of interest were unaffected $X^2(3) = .32$.

Unemployment as a Self-Evaluative Threat

One of the assumptions we make in this investigation is that unemployment is experienced as a stressor that could challenge worldviews and even be construed as a self-evaluative threat (Fryer 1986). To at least partly examine our assumption, we analyzed adults' open-ended descriptions of economic hardships they were experiencing. Two raters classified the responses and inter-rater agreement (based on percent of agreement between the raters) was high (.95). Participants' responses could include one or more categories. About half of the unemployed respondents described the circumstances leading to their unemployment (84 instances). Many respondents reported feeling stressed (109 instances, 64% of sample), including specific types of emotional

distress (73 instances, 43%), and health-related concerns (13 instances, 8%). Many described a basic lack of financial resources, including needing financial assistance from family members (85 instances, 50%), having an altered living situation (32 instances, 18%), or other types of financial dependency (17 instances, 10%). There were many examples of inadequate financial resources to cover basic necessities (78 instances, 46% of sample) and having to "cut back" (53 instances, 31%). Taken together, in addition to reporting many challenging circumstances associated with their unemployment, unemployed adults in our sample reported feelings of general and emotional distress associated with their unemployment. We interpret this analysis as partial evidence that unemployment was perceived as stressful.

Hypothesis Testing

Tables 1 and 2 presents basic descriptive information about our study variables and the correlations among these variables, as well as differences in study variables and correlations between unemployed and employed samples. Length of unemployment was not correlated with any of the study variables (*r*s ranged from −.01 to.10). Quiet ego was positively correlated with self-rated health, self-compassion, and PTG. Self-compassion was positively correlated with self-rated health and PTG. There was no correlation between PTG and self-rated health. In Tables 1 and 2, 95% confidence intervals for the correlations were computed from 10,000 bootstrapped samples using the SPSS procedure.

Next, we examined our hypotheses using the SPSS PROCESS module (v. 24.0, SPSS Science, Chicago, IL, USA). We tested a mediator model (Hayes' model 4 specifying two mediators) with bootstrapping procedures to produce 95% confidence intervals for unstandardized beta coefficients based on 20,000 samples (Preacher et al. 2007). We hypothesized that, in unemployed adults, quiet ego would be positively related to self-rated health, and that self-compassion and PTG would mediate the relationship between quiet ego and self-rated health.

Model results are presented in Table 3 and in Fig. 2. As hypothesized, the total effect of quiet ego on self-rated health was significant, ß = .22, $p < .01$, supporting H1. As expected, quiet ego was positively related to self-compassion (H2), ß = .50 and to PTG (H3), ß = .46. The effect sizes were between small and medium (Miles and Shevlin 2001). Self-rated health was related to self-compassion (H4), ß = .19, $p < .05$, but not

Table 1 Study variables, means, and differences between samples

	Unemployed (N = 173)		Employed (N = 60)		Difference[a]
	Mean	SD	Mean	SD	t
Quiet Ego	3.67	0.60	3.74	0.67	0.76
Self-Compassion	3.50	0.87	3.58	0.85	0.63
Post-Traumatic Growth	4.25	1.11	3.94	1.19	1.84*
Self-rated health	3.36	1.11	3.53	1.04	1.04

*$p < .05$

[a] Comparison between unemployed and employed samples using independent samples t-tests

Table 2 Correlations and differences between sample correlations

	Unemployed (N = 173)		Employed (N = 60)		Difference[a]
	r	95% CI	r	95% CI	z
Quiet Ego & Self-Compassion	.50***	.360, .607	.55***	.103, .331	−0.45
Quiet Ego & Post-Traumatic Growth	.47***	.339, .578	.02	−.241, .309	3.20**
Quiet Ego & Self-Rated Health	.23*	.056, .359	.12	−.169, .421	0.74
Self-Compassion & Post-Traumatic Growth	.36***	.204, .501	.01	−.277, .304	2.40*
Self-Compassion & Self-Rated Health	.25**	.096, .394	.27*	−.032, .533	.14
Post-Traumatic Growth & Self-Rated Health	.11	−.048, .255	.04	−.214, .316	.46

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

[a] Comparison with unemployed sample correlations using Fisher r to z transformation

PTG (H5), ß = −.02. The indirect effect of quiet ego on self-rated health (via self-compassion) was significant, ß = .09, $p < .05$. Contrary to our prediction, the indirect effect via PTG (H6b) was not significant, ß = −.01. With both mediators in the model, the relationship between quiet ego and self-rated health was not significant, ß = .13, showing that self-compassion mediated the relationship between quiet ego and self-rated health, supporting H6a. Thus, we had mixed support for H6. The analyses were also computed using gender as a covariate, and the results were nearly identical to those reported here.[4]

Post-Hoc Analyses

An important assumption underlying our study is that unemployed adults would benefit from compassionate resources because of the threat to self-worth posed by unemployment. Although not originally part of our investigation, we conducted a post-hoc analysis of this assumption by analyzing data from a smaller sample of employed individuals during our data collection phase (42 females and 18 males; average age 36.88, $SD = 12.61$). The employed sample was demographically similar to our unemployed sample: age ($t(212) = .26$, $p = .794$) and gender ($X^2 = 1.10$, $p = .295$). The employed sample had fewer White (35%) and more Hispanic (28%) adults than our unemployed sample ($X^2 = 3.33$ and 3.43, $p < .07$, respectively). Twenty-three percent of the employed sample were Black, 8% were Native American, and one Pacific Islander. We analyzed employed adults' responses to the same question we described above about perceived economic stressors during the economic downturn. Employed adults described efforts at seeking better employment opportunities ($n = 11$), loss of income due to furloughs, pay-cuts, and loss of advancement opportunities ($n = 18$), not having health care benefits ($n = 3$), or other impacts to their financial situation ($n = 3$).

[4] Prior to our analyses of interest, we examined if there were systematic differences in the data by gender. A univariate ANOVA revealed gender differences for PTG, $F(1,170) = 7.14$, $p = .008$, $eta^2 = .04$). Women had higher PTG scores than men (female mean = 4.43, SD = 1.02; male mean = 3.97, SD = 1.17. A meta-analysis of 70 studies (Vishnevsky et al. 2010) revealed a small to moderate gender difference (g = .27), with women reporting more PTG than men (Vishnevsky et al. 2010). This article also mentions that gender is usually just treated as a control variable in PTG studies, which we have done in our analyses.

Table 3 PROCESS double mediation (Model 4 with two mediators) in unemployed adults, N = 173

		B	ß	$SE_ß$	t/z	95% CI of *ß*
H2	Quiet ego ➔ Self-Compassion[a]	.61	.50	.07	7.35***	.367, .631
H3	Quiet ego ➔Post-Traumatic Growth[b]	.73	.46	.07	6.80***	.230, .533
H4	Self-Compassion ➔Self-Rated Health	.25	.19	.09	2.25*	.023, .362
H5	Post-Traumatic Growth ➔Self-Rated Health	−.02	−.02	.09	−.26	−.190, .145
H1	Quiet Ego ➔Self-Rated Health[c]	.21	.13	.09	1.42	.067, .365
H6a	Indirect: Quiet Ego ➔Self-Rated Health (Self-Compassion)[d]	.15	.09	.05	2.13*	.008, .195
H6b	Indirect: Quiet Ego ➔Self-Rated Health (Self-Compassion–Post-Traumatic Growth)	−.02	−.01	.04	−.26	−.085, .071
H5	Total: Quiet Ego ➔Self-Rated Health[e]	.34	.22	.08	2.86**	−.051, .312

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

Model statistics

[a] $F(1,172) = 54.09$****

[b] $F(1,172) = 46.24$***

[c] $F(3, 170) = 4.45$**

[d] estimates derived from bootstrapping with 20,000 sample

[e] $F(1,172) = 8.15$**

Like their unemployed counterparts, employed participants also reported financial stressors such as the difficulties of "living paycheck to paycheck" ($n = 13$), needing family financial assistance ($n = 5$) and having an altered living situation ($n = 3$). Only four employed participants described feeling stress, one mentioned feeling emotional distress, and one mentioned health-related concerns. Some described the difficulties their spouse, adult children, or "others" were having in not being able to find employment ($n = 7$). A second strategy to test the assumption that unemployed adults experienced threat to self-worth posed by unemployment was to compare our unemployed and employed samples on a measure of life satisfaction (Diener et al. 1985) that was

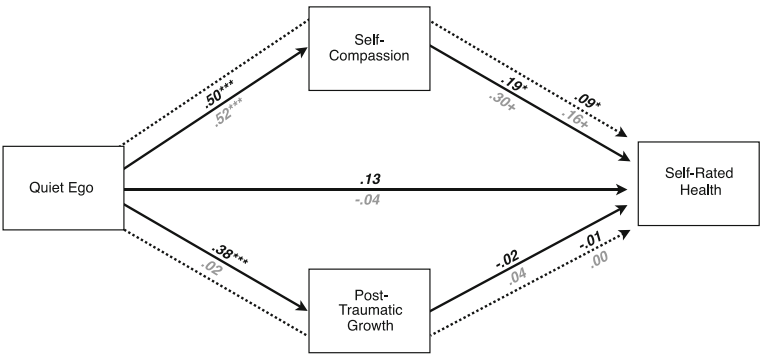

Fig. 2 *Regression Results for Unemployed (N = 173)* and Employed (*N* = 60) Adults. Solid lines depict direct effects. Dashed lines depict indirect effects. Results from unemployed sample results are on top of line; results from employed sample are beneath the line. + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

used in the larger study (but not specifically to test this research question). We had information on life satisfaction from Diener et al.'s (1985) five-item life satisfaction scale (sample item: "In most ways my life is close to my ideal"). The post hoc results showed that the unemployed sample had lower life satisfaction scores ($M = 2.81$, $SD = .98$) than the employed sample ($M = 3.07$, $SD = .96$; $t = 1.75$, $p < .05$, one-tailed). Taken together, our post-hoc analyses suggest that while the recession had negative impacts on both unemployed and employed adults, the unemployed adults' financial hardships were more likely to be described as stressful and affecting their emotional well-being, and they reported lower life satisfaction compared to their employed counterparts. As indicated in Tables 1 and 2, unemployed and employed adults were statistically equivalent on measures of quiet ego, self-compassion, and self-rated health. Unemployed adults reported higher PTG than employed adults.

In our sample of employed adults there was a positive correlation between quiet ego and self-compassion, and between self-compassion and self-rated health. These correlations were not significantly different from those found in the unemployed sample. However, employed adults showed no correlation between self-compassion and PTG or between quiet ego and PTG (differences were significant as computed by Fisher's r-to-z transformation; see Tables 1 and 2). Results from testing Hayes' model 4 in our employed sample are presented in Table 4, and on the basis of our analyses we conclude that 1) quiet ego and self-compassion are psychosocial resources that were related to self-rated health for both unemployed and employed adults during the economic crisis and 2) for unemployed adults, who may have perceived unemployment as a threat to self-worth (Fryer 1986), compassionate resources (quiet ego and self-compassion) were related to PTG.

Table 4 PROCESS serial mediation model results (employed adults, N = 60)

		B	ß	$SE_ß$	t/z	95% CI of *ß*
H2	Quiet ego ➔ Self-Compassion[a]	.70	.53	.11	4.89***	.313, .747
H3	Quiet ego ➔Post-Traumatic Growth[b]	.04	.02	.11	.15	−.245, .287
H4	Self-Compassion ➔Self-Rated Health	.36	.30	.16	1.85	.023, .362
H5	Post-Traumatic Growth ➔Self-Rated Health	.03	.04	.13	.29	−.190, .145
H1	Quiet Ego ➔Self-Rated Health[c]	−.07	−.04	.15	−.27	−.051, .312
H6a	Indirect: Quiet Ego ➔Self-Rated Health (Self-Compassion)[d]	.25	.16	.11	1.70+	−.089, .357
H6b	Indirect: Quiet Ego ➔Self-Rated Health (Self-Compassion–Post-Traumatic Growth)	.00	.00	.02	.04	−.043, .048
H5	Total: Quiet Ego ➔Self-Rated Health[e]	.19	.12	.13	.89	−.146, .378

+ $p < .08$, * $p < .05$, ** $p < .01$, *** $p < .001$

Model statistics

[a] $F(1,58) = 23.97$****

[b] $F(1,58) = .024$

[c] $F(3, 56) = 1.44$

[d] estimates derived from bootstrapping with 20,000 sample

[e] $F(1,58) = .79$

Discussion

Our research highlights the value of psychological resources within the occupational health context. We examined the potential benefits of compassionate psychosocial resources in a sample of unemployed and financially distressed individuals at the height of the most recent economic crisis, a situation that is consistent with the types of stressful events that may prompt self-criticism (Fryer 1986; Neff 2003), a search for meaning (Antonovsky 1987) and personal growth (Tedeschi and Calhoun 1996, 2004). Quiet ego, as a characteristic adaptation that reflects compassionate values and motives, may aid individuals in developing and applying positive psychological resources, even (or especially) when facing adversity (Bauer and Wayment 2008; Luthans et al. 2007; Wayment et al. 2018). The adults in our sample had been unemployed, on average, for over a year and reported a variety of stressors that created psychological and emotional distress in addition to challenges related to their finances, living situations, and caretaking responsibilities. Our primary outcome was self-rated health, a widely-used single-item measure that is highly predictive of many objective physical health outcomes (Barger et al. 2016; Idler and Benyamini 1997; Martínez-Sánchez and Regidor 2002). Consistent with our hypothesis, we found that quiet ego was related to better self-rated health among unemployed adults, explained in part, by an ability to extend compassion to the self, a resource that could be especially helpful in coping with unemployment.

Our investigation was designed to examine whether self-compassion and PTG were able to help explain a positive relationship between quiet ego and self-rated health. The relationship between quiet ego and self-rated health in our sample of unemployed adults was explained by self-compassion, the ability to extend kindness to the self when experiencing setbacks. This relationship has also been found in samples of undergraduate students (Wayment and Bauer 2017; Wayment et al. 2016). Given that our study assessed these variables during the height of the most significant financial crisis since the Great Depression, our results suggest that the cultivation of quiet ego characteristics could be adaptive in coping with employment stressors even in highly adverse contexts. These results are consistent with other research demonstrating the benefits of self-compassion in coping with stressful situations. For example, self-compassion is associated with less self-criticism, rumination, proneness to shame, fear of failure, negative self-evaluations, and perceived stress (Leary et al. 2007; Neff et al. 2007; Wayment et al. 2016). Self-compassion is associated with positive cognitive restructuring and social connectedness (Allen and Leary 2010), abilities and resources that should be closely related to finding meaning from a stressful situation such as unemployment. In the past decade, the amount of research on self-compassion has risen exponentially. Yet, there are few studies that have examined self-compassion in the context of unemployment (e.g., Sabaitytė and Diržytė 2016), and none with unemployed adults. Our findings add to the growing body of research indicating that self-compassion is also a valuable psychosocial resource that can attenuate the negative impact of major life stressors.

This is the first study that examines compassionate correlates of PTG in the context of unemployment. Higher levels of PTG in our unemployed sample (relative to employed/underemployed adults) suggest that unemployment is a disrupter to which people can respond by finding meaning and experiencing growth (Tedeschi and

Calhoun 1996). As we theorized, quiet ego was positively related to PTG. This finding supports earlier research arguing that quiet ego is a type of eudaimonic motivation (Wayment and Bauer 2017). Specifically, our data provide real-world evidence that for adults facing serious setbacks, a self-identity grounded in balance and growth may facilitate the dimensions assessed in the PTG scale: personal growth, self-efficacy, personal relationships, compassion, and appreciation for life. A recent study of mothers raising children with Autism Spectrum Disorder also found a relationship between quiet ego and PTG (Wayment et al. 2018).

We had expected that both self-compassion and PTG would mediate the relationship between quiet ego and self-rated health. Contrary to our expectation, however, we found no relationship between PTG and self-rated health in unemployed adults. There are several potential reasons. First, our cross-sectional design may have been inadequate to detect any health related effects from PTG (Tedeschi and Calhoun 2004). Second, in studies where a relationship between PTG and health has been found, the stressors have been primarily health-related (Barskova and Oesterreich 2009; Morrill et al. 2008; Sawyer et al. 2010). Third, PTG may be more directly related to indicators of life satisfaction and well-being rather than to health. This explanation was supported by post-hoc analyses[5]: for unemployed adults, PTG and self-compassion were both related to life satisfaction, and mediated the relationship between QE and life satisfaction. Further, this pattern was not present in the employed sample. Taken together, our results suggest that quiet ego, self-compassion, and PTG may all be forms of positive psychological capital in the context of unemployment. Finally, PTG may not be best conceptualized as a predictor of health outcomes, but rather as an important outcome in and of itself (Park and Helgeson 2006).

Implications

Our results add to the growing research on the benefits of cultivating a compassionate self-identity and other characteristics that help individuals escape the adverse effects associated with excessive self-interest (Kesebir 2014; Sternberg 2013; Bauer and Wayment 2008). Although organizational researchers have become more interested in positive psychological constructs (e.g., PsyCap), quiet ego and other compassion-related constructs have rarely been explicitly considered. Yet, as some researchers have argued, these constructs likely have the potential to help individuals cope with unemployment and work-related stressors (Huffman et al. 2015; Hyland et al. 2015).

The results of the current study have theoretical and practical implications. First, our results strengthen the validity of the quiet ego construct by examining its associations with self-compassion and PTG (well-known psychosocial constructs) in the highly stressful context of unemployment and job search (Lim et al. 2016). One practical application of our results is that quiet ego and self-compassion may be worth

[5] In response to a reviewer's question, we re-ran our analyses replacing self-reported health with a measure of life satisfaction (also available to us). We explored the data two ways, with hierarchical regressions and using the PROCESS model (Model 4). Among the unemployed, PTG and self-compassion were both related to life satisfaction, and both served as mediators between QE and Life Satisfaction. In the employed sample, neither quiet ego, self-compassion, nor PTG were related to life satisfaction. These exploratory analyses are consistent with our findings that in the context of unemployment, quiet ego, self-compassion, and PTG may be useful positive personal resources.

developing. Two recent studies have shown that quiet ego characteristics can be strengthened with a brief cognitive intervention that reduces psychological, biological, and physiological measures of stress (Collier et al. 2016; Wayment et al. 2015a, b). Research has also shown brief interventions designed to strengthen self-compassion to be effective in coping with stress (e.g., Heriot-Maitland et al. 2014; Neff and Germer 2013). The use of brief quiet ego and/or self-compassion interventions could provide individuals with specific strategies that may help to reduce perceived threats to self-worth during stressful events such as unemployment. In addition, strengthening quiet ego characteristics could help people cope with stressors associated with employment. Huffman et al. (2015) argued that quiet ego, compared to other positive psychological constructs such as mindfulness, may be more amenable to Western occupational environments. State funded centers, federal government networks (e.g., careeronestop; https://www.careeronestop.org) and nonprofit agencies (e.g., platformtoemployment.com) seeking to assist un- and under-employed adults could consider implementing brief interventions to cultivate self-compassion and quiet ego characteristics. These interventions could assist individuals coping with financial stressors.

Limitations and Future Research

Although this study has several strengths and contributes to the literature on quiet ego, self-compassion, and PTG, we acknowledge several limitations of our study. First, we relied on self-report data. In addition to the normal pitfalls associated with self-report data, we did not directly measure whether unemployment was interpreted negatively or as a self-evaluative threat. Our data collection strategy (asking participants waiting at job center to complete a questionnaire) necessitated a succinct survey with abbreviated measures of published scales (e.g., the 14-item Quiet Ego Scale, Wayment et al. 2015a, b; the 26-item Self-Compassion Scale, Neff 2003). In spite of this limitation, our CFA analyses suggest that the measures we used were distinct from one another, that the reliabilities for the abbreviated scales were adequate, and that there was little impact of common method bias. Future studies would benefit from using the full-versions of Quiet Ego Scale and Self-Compassion Scale, in addition to obtaining more information about personal experiences of employment stressors (like unemployment, underemployment, and job insecurity).

Another limitation is our cross-sectional study design. Although our sample of unemployed adults reported lower life satisfaction compared to their employed counterparts, Lucas et al. (2004) found that unemployed adults tend to return to baseline levels of life satisfaction after unemployment has lasted for some time. Thus, longitudinal research on how individuals cope well with unemployment is important (Böckerman and Ilmakunnas 2009). Future studies would benefit from a longitudinal examination of quiet ego characteristics, self-compassion, and PTG to allow us to directly assess long term effects of behavioral strategies on health outcomes, and whether there could be gender differences in these processes. Additionally, a longitudinal design would provide us with further insight on the processes associated with the relationship between quiet ego and health in unemployed individuals. For example, we would be able to examine questions such as whether adults who perceive unemployment as less threatening report a greater sense of self-worth and efficacy; if unemployed adults who are healthier utilize more flexible job-seeking strategies; or if unemployed

adults are better able to use social resources for finding employment. Similarly, a qualitative design could provide additional insight that is more difficult to glean from quantitative data. For example, interview data could provide more context about which specific stressors individuals are experiencing and whether quiet ego characteristics are more useful for specific types of stressors.

It should also be noted that we utilized a small sample of unemployed adults to examine assumptions about our unemployed sample. Although the employed sample size may have been technically adequate to test a four variable regression model (Austin and Steyerberg 2015; Kline 2011), the very small sample size of our employed sample yielded unstable estimates, even with bootstrapping procedures to estimate confidence intervals (Cumming 2014). Accordingly, employed sample results should still be interpreted very cautiously. Future investigations with larger samples are needed for more stable statistical estimates. Finally, and potentially related, the strength of the relationships we found were small to moderate, suggesting that future research should examine other related types of compassion-focused variables. For example, religious teachings and prayer (for others, not the self) are associated with reduced psychological distress during financial hardship (Bradshaw and Ellison 2010). Future investigations should continue to examine the relationship of quiet ego characteristics to belief systems or other important worldviews that facilitate coping, adjustment, and growth.

Future research may also consider where quiet ego fits in with other positive organizational constructs such as PsyCap. Whereas PsyCap is relatively "state-like," the quiet ego is conceptualized as more "trait-like" (Bauer and Wayment 2008; Luthans et al. 2007). If this is the case, developing a quiet ego may provide people with a more sustainable source of psychological capital that remains ready to be deployed in various contexts within and beyond the workplace. That is, quiet ego characteristics may predispose individuals toward chronically experiencing states of optimism, resilience, hope, and efficacy when facing stressors. Given that quiet ego is amenable to brief interventions (a hallmark of state-like constructs, Newman et al. 2014), PsyCap and quiet ego may be relatively close to one another on the state-trait continuum and instead differ in the personal resources they provide. As discussed previously, although PsyCap and quiet ego both are associated with many of the same personal characteristics (e.g., resiliency, extraversion, self-efficacy), quiet ego is uniquely associated with characteristics that facilitate a more balanced approach toward the self and others (Luthans et al. 2007; Wayment et al. 2015a, b). If PsyCap and quiet ego are comprised of distinct personal resources, they may better serve different personal and organizational goals within and beyond the workplace.

Conclusion

Our findings provide novel evidence that quiet ego characteristics and self-compassion may be important forms of psychological capital for individuals coping with financial and other employment-related stressors. Importantly, we found evidence that the influence of quiet ego on health is mediated by self-compassion, replicating other research demonstrating the link between quiet ego and self-compassion. Taken together, our results provide emerging support for the idea that quiet ego and self-compassion may be important trait- and state-like resources that facilitate growth and health in the context of unemployment. To the extent that

quiet ego and self-compassion are resources that can be cultivated, our findings add to the burgeoning research highlighting the value of positive psychological constructs for organizational researchers and practitioners.

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References

Affleck, G., Tennen, H., Croog, S., & Levine, S. (1987). Causal attribution, perceived benefits, and morbidity after a heart attack: an 8-year study. *Journal of Consulting and Clinical Psychology, 55*, 29–35. https://doi.org/10.1037/0022-006x.55.1.29.

Allen, A., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass, 4*, 107–118. https://doi.org/10.1111/j.1751-9004.2009.00246.x.

Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass. https://doi.org/10.4135/9781446221129.n9.

Åslund, C., Starrin, B., & Nilsson, K. W. (2014). Psychosomatic symptoms and low psychological well-being in relation to employment status: the influence of social capital in a large cross-sectional study in Sweden. *International Journal for Equity in Health, 13*, 22. https://doi.org/10.1186/1475-9276-13-22.

Austin, P. C., & Steyerberg, E. W. (2015). The number of subjects per variable required in linear regression analyses. *Journal of Clinical Epidemiology, 68*, 627–636. https://doi.org/10.1016/j.jclinepi.2014.12.014.

Bambra, C., & Eikemo, T. (2008). Welfare state regimes, unemployment and health: a comparative study of the relationship between unemployment and self-reported health in 23 European countries. *Journal of Epidemiology & Community Health, 63*, 92–98. https://doi.org/10.1136/jech.2008.077354.

Barger, S. D., Cribbet, M. R., & Muldoon, M. F. (2016). Participant-reported health status predicts cardiovascular and all-cause mortality independent of established and nontraditional biomarkers: evidence from a representative US sample. *Journal of the American Heart Association, 5*, e0034741. https://doi.org/10.1161/jaha.116.003741.

Barskova, T., & Oesterreich, R. (2009). Post-traumatic growth in people living with a serious medical condition and its relations to physical and mental health: A systematic review. *Disability & Rehabilitation, 31*, 1709–1733. https://doi.org/10.1080/09638280902738441.

Bauer, J. J., & Wayment, H. A. (2008). The psychology of the quiet ego. In H. A. Wayment & J. J. Bauer (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 7–17). Washington: APA. https://doi.org/10.1037/11771-001.

Bentler, P. M. (1995). *EQS structural equations program manual [Computer software manual]*. Encino: Multivariate Software.

Böckerman, P., & Ilmakunnas, P. (2009). Unemployment and self-assessed health: Evidence from panel data. *Health Economics, 18*, 161–179. https://doi.org/10.1002/hec.1361.

Bollen, K. A., & Long, J. S. (Eds.). (1993). *Testing structural equation models*. Newbury Park: Sage.

Bower, J. E., Kemeny, M. E., Taylor, S. E., & Fahey, J. L. (1998). Cognitive processing, discovery of meaning, CD4 decline, and AIDS-related mortality among bereaved HIV-seropositive men. *Journal of Consulting and Clinical Psychology, 66*, 979–986. https://doi.org/10.1037/0022-006x.66.6.979.

Bradshaw, M., & Ellison, C. G. (2010). Financial hardship and psychological distress: Exploring the buffering effects of religion. *Social Science & Medicine, 71*, 196–204. https://doi.org/10.1016/j.socscimed.2010.03.015.

Breines, J. G., McInnis, C. M., & Kuras, Y. I. (2015). Self-compassionate young adults show lower salivary alpha-amylase responses to repeated psychosocial stress. *Self and Identity, 14*, 390–402. https://doi.org/10.1080/15298868.2015.1005659.

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. *American Journal of Orthopsychiatry, 73*, 279–287. https://doi.org/10.1037/0002-9432.73.3.279.

Centers for Disease Control and Prevention. (1995). Health-related quality-of-life measures United States, 1993. *JAMA, 273*, 1084–1085. https://doi.org/10.1001/jama.273.14.1084.

Collier, A. D. F., Wayment, H. A., & Birkett, M. (2016). Impact of making textile handcrafts on mood enhancement and inflammatory immune changes. *Art Therapy, 33*, 178–175. https://doi.org/10.1080/07421656.2016.1226647.

Creed, P. A., & Klisch, J. (2005). Future outlook and financial strain: Testing the personal agency and latent deprivation models of unemployment and well-being. *Journal of Occupational Health Psychology, 10*, 251–260. https://doi.org/10.1037/1076-8998.10.3.251.

Cruess, D. G., Antoni, M. H., McGregor, B. A., Kilbourn, K. M., Boyers, A. E., Alferi, S. M., ... & Kumar, M. (2000). Cognitive-behavioral stress management reduces serum cortisol by enhancing benefit finding among women being treated for early stage breast cancer. *Psychosomatic Medicine*, *62*, 304–308. https://doi.org/10.1097/00006842-200005000-00002

Cumming, G. (2014). The new statistics: Why and how. *Psychological Science, 25*, 7–29. https://doi.org/10.1177/0956797613504966.

DeSalvo, K. B., Fan, V. S., McDonell, M. B., & Fihn, S. D. (2005). Predicting mortality and healthcare utilization with a single question. *Health Services Research, 40*, 1234–1246. https://doi.org/10.1111/j.1475-6773.2005.00404.x.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.

Dunne, S., Sheffield, D., & Chilcot, J. (2016). Self-compassion, physical health and the mediating role of health-promoting behaviours. *Journal of Health Psychology, 23*, 993–997. https://doi.org/10.1177/1359105316643377.

Fryer, D. (1986). Employment deprivation and personal agency during unemployment: A critical discussion of Jahoda's explanation of the psychological effects of unemployment. *Social Behavior, 1*, 3–23.

Fryer, D. M., & Payne, R. L. (1986). Being unemployed: A review of the literature on the psychological experience of unemployment. In C. L. Cooper & I. Robertson (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 235–278). Chichester, England: Wiley.

Grossi, G., Perski, A., Lundberg, U., & Soares, J. (2001). Associations between financial strain and the diurnal salivary cortisol secretion of long-term unemployed individuals. *Integrative Physiological & Behavioral Science, 36*, 205–219. https://doi.org/10.1007/bf02734094.

Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The role of self-compassion in physical and psychological well-being. *The Journal of Psychology, 147*, 311–323. https://doi.org/10.1080/00223980.2012.693138.

Harms, P. D., Vanhove, A., & Luthans, F. (2017). Positive projections and health: An initial validation of the implicit psychological capital health measure. *Applied Psychology: An International Review, 66*, 78–102. https://doi.org/10.1111/apps.12077.

Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology, 74*, 797–816. https://doi.org/10.1037/0022-006x.74.5.797.

Hergenrather, K. C., Zeglin, R. J., McGuire-Kuletz, M., & Rhodes, S. D. (2015). Employment as a social determinant of health: a systematic review of longitudinal studies exploring the relationship between employment status and physical health. *Rehabilitation Research, Policy, and Education, 29*, 2–26. https://doi.org/10.1891/2168-6653.29.1.2.

Heriot-Maitland, C., Vidal, J. B., Ball, S., & Irons, C. (2014). A compassionate-focused therapy group approach for acute inpatients: Feasibility, initial pilot outcome data, and recommendations. *British Journal of Clinical Psychology, 53*, 78–94. https://doi.org/10.1111/bjc.12040.

Hollederer, A. (2015). Unemployment, health and moderating factors: The need for targeted health promotion. *Journal of Public Health, 23*, 319–325. https://doi.org/10.1007/s10389-015-0685-4.

Homan, K. J., & Sirois, F. M. (2017). Self-compassion and physical health: Exploring the roles of perceived stress and health-promoting behaviors. *Health Psychology Open, 4*(2), 2055102917729542.

Hooper, D. Coughlan, J. & Mullen, M. R. (2008). Structural equation modelling: guidelines for determining model fit. The electronic *Journal of Business Research Methods, 6,* 53–60

Huffman, A. H., Irving, L. H., & Wayment, H. A. (2015). The quiet ego: assuaging organizational concerns about mindfulness. *Industrial and Organizational Psychology, 8*, 661–667. https://doi.org/10.1017/iop.2015.96.

Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organizational performance. *Industrial and Organizational Psychology, 8*, 576–602. https://doi.org/10.1017/iop.2015.41.

Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behavior, 38*, 21–37. https://doi.org/10.2307/2955359.

Janoff-Bulman, R. (1992). *Shattered assumptions: Toward a new psychology of trauma*. New York: Free Press.

Kesebir, P. (2014). A quiet ego quiets death anxiety: Humility as an existential anxiety buffer. *Journal of Personality and Social Psychology, 106*, 610–623. https://doi.org/10.1037/a0035814.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press.

Leary, M., Tate, E., Adams, C., Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality & Social Psychology, 92*, 887–904. https://doi.org/10.1037/0022-3514.92.5.887.

Lim, V. K., Chen, D., Aw, S. S., & Tan, M. (2016). Unemployed and exhausted? Job-search fatigue and reemployment quality. *Journal of Vocational Behavior, 92*, 68–78. https://doi.org/10.1016/j.jvb.2015.11.003.

Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the set point for life satisfaction. *Psychological Science, 15*, 8–13. https://doi.org/10.1111/j.0963-7214.2004.01501002.x.

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*, 541–572. https://doi.org/10.1111/j.1744-6570.2007.00083.x.

Lynch, J. W., Kaplan, G. A., & Shema, S. J. (1997). Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *New England Journal of Medicine, 337*, 1889–1895. https://doi.org/10.1056/nejm199712253372606.

Martínez-Sánchez, E., & Regidor, E. (2002). Self-rated health by educational level in persons with and without health problems. *Journal of Health Psychology, 7*, 459–468. https://doi.org/10.1177/1359105302007004626.

McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality, 63*, 365–396.

McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology, 90*, 53–76. https://doi.org/10.1037/0021-9010.90.1.53.

Miles, J., & Shevlin, M. (2001). *Applying regression and correlation: A guide for students and researchers*. London: Sage.

Moran, S., Burker, E. J., & Schmidt, J. (2013). Posttraumatic growth and posttraumatic stress disorder in veterans. *The Journal of Rehabilitation, 79*, 34–43.

Morrill, E. F., Brewer, N. T., O'Neill, S. C., Lillie, S. E., Dees, E. C., Carey, L. A., & Rimer, B. K. (2008). The interaction of post-traumatic growth and post-traumatic stress symptoms in predicting depressive symptoms and quality of life. *Psycho-Oncology, 17*, 948–953. https://doi.org/10.1002/pon.1313.

Morris, J. K., Cook, D. G., & Shaper, A. G. (1994). Loss of employment and mortality. *The BMJ, 308*, 1135–1139. https://doi.org/10.1136/bmj.308.6937.1135.

Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85–102. https://doi.org/10.1080/15298860309032.

Neff, K. D. (2008). Self-compassion: Moving beyond the pitfalls of a separate self-concept. In J. Bauer & H. A. Wayments (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 95–106). Washington: APA Books. https://doi.org/10.1037/11771-009.

Neff, K. D. (2015). The self-compassion scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness, 7*, 264–274. https://doi.org/10.1007/s12671-015-0479-3.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology, 69*, 28–44. https://doi.org/10.1002/jclp.21923.

Neff, K. D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality, 41*, 139–154. https://doi.org/10.1016/j.jrp.2006.03.004.

Newman, A., Ucbasaran, D., Zhu, F. E. I., & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior, 35*, 120–138. https://doi.org/10.1002/job.1916.

Park, C. L., & Helgeson, V. S. (2006). Introduction to the special section: growth following highly stressful life events–current status and future directions. *Journal of Consulting and Clinical Psychology, 74*, 791–796. https://doi.org/10.1037/0022-006x.74.5.791.

Park, C. L., Chmielewski, J., & Blank, T. O. (2010). Post-traumatic growth: finding positive meaning in cancer survivorship moderates the impact of intrusive thoughts on adjustment in younger adults. *Psycho-Oncology, 19*, 1139–1147. https://doi.org/10.1002/pon.1680.

Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior, 74*, 264–282. https://doi.org/10.1016/j.jvb.2009.01.001.

Peterson, C., Park, N., Pole, N., D'Andrea, W., & Seligman, M. E. (2008). Strengths of character and posttraumatic growth. *Journal of Traumatic Stress, 21*, 214–217. https://doi.org/10.1002/jts.20332.

Powell, T., Gilson, R., & Collin, C. (2012). TBI 13 years on: Factors associated with posttraumatic growth. *Disability Rehabilitation., 34*, *1461–1467*. https://doi.org/10.3109/09638288.2011.644384.

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*, 185–227. https://doi.org/10.1080/00273170701341316.

Price, R. H., Choi, J. N., & Vinokur, A. D. (2002). Links in the chain of adversity following job loss: How financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *Journal of Occupational Health Psychology, 7*, 302–312. https://doi.org/10.1037//1076-8998.7.4.302.

Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical Psychology & Psychotherapy, 18*, 250–255. https://doi.org/10.1002/cpp.702.

Rani, E. K. (2015). The role of psychological capital (PsyCap) in psychological well being of unemployed Indian youth. *Journal of Psychosocial Research, 10*, 149–157.

Rantakeisu, U., Starrin, B., & Hagquist, C. (1999). Financial hardship and shame: A tentative model to understand the social and health effects of unemployment. *British Journal of Social Work, 29*, 877–901. https://doi.org/10.1093/bjsw/29.6.877.

Roelfs, D. J., Shor, E., Davidson, K. W., & Schwartz, J. E. (2011). Losing life and livelihood: A systematic review and meta-analysis of unemployment and all-cause mortality. *Social Science & Medicine, 72*, 840–854. https://doi.org/10.1016/j.socscimed.2011.01.005.

Sabaitytė, E., & Diržytė, A. (2016). Psychological capital, self-compassion, and life satisfaction of unemployed youth. *International Journal of Psychology: A Biopsychosocial Approach, 19*, 49–69. https://doi.org/10.7220/2345-024x.19.3.

Sawyer, A., Ayers, S., & Field, A. P. (2010). Posttraumatic growth and adjustment among individuals with cancer or HIV/AIDS: A meta-analysis. *Clinical Psychology Review, 30*, 436–447. https://doi.org/10.1016/j.cpr.2010.02.004.

Schmitz, H. (2011). Why are the unemployed in worse health? The causal effect of unemployment on health. *Labour Economics, 18*, 71–78. https://doi.org/10.1016/j.labeco.2010.08.005.

Sirois, F. M., Kitner, R., & Hirsch, J. (2015). Self-compassion, affect, and health-promoting behaviors. *Health Psychology, 34*, 661–669. https://doi.org/10.1037/hea0000158.

Sternberg, R. J. (2013). Personal Wisdom in the Balance. In M. Ferrari & N. M. Weststrate (Eds.), *The scientific study of personal wisdom: From contemplative traditions to neuroscience* (pp. 53–74). New York: Springer. https://doi.org/10.1007/978-94-007-7987-7_3.

Sutin, A. R., Stephan, Y., & Terracciano, A. (2018). Facets of conscientiousness and objective markers of health status. *Psychology & Health, 2*, 1–16. https://doi.org/10.1080/08870446.2018.1464165.

Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455–471. https://doi.org/10.1007/bf02103658.

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*, 1–18. https://doi.org/10.1207/s15327965pli1501_01.

Teodorescu, D. S., Siqveland, J., Heir, T., Hauff, E., Wentzel-Larsen, T., & Lien, L. (2012). Posttraumatic growth, depressive symptoms, posttraumatic stress symptoms, post-migration stressors and quality of life in multi-traumatized psychiatric outpatients with a refugee background in Norway. *Health and Quality of Life Outcomes, 10*, 84. https://doi.org/10.1186/1477-7525-10-84.

Terry, M. L., & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity, 10*, 352–362. https://doi.org/10.1080/15298868.2011.558404.

Terry, M. L., Leary, M. R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity, 12*, 278–290. https://doi.org/10.1080/15298868.2012.667913.

Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress, 21*, 556–558. https://doi.org/10.1002/jts.20374.

Ullah, P. (1990). The association between income, financial strain and psychological well-being among unemployed youths. *Journal of Occupational Psychology, 63*, 317–330. https://doi.org/10.1111/j.2044-8325.1990.tb00533.x.

Vishnevsky, T., Cann, A., Calhoun, L. G., Tedeschi, R. G., & Demakis, G. J. (2010). Gender differences in self-reported posttraumatic growth: A meta-analysis. *Psychology of Women Quarterly, 34*(1), 110–120. https://doi.org/10.1111/j.1471-6402.2009.01546.x.

Wayment, H.A., & Bauer, J.J. (2017). The Quiet Ego: Motives and Values for the Balance and Growth of the Self and Others in Relation to Well-Being. *Journal of Happiness Studies*. https://doi.org/10.1007/s10902-017-9848-z

Wayment, H. A., & Cavolo, K. (2018). Quiet Ego, Self-Regulatory Skills, and Perceived Stress in College Students. *Journal of American College Health*. https://doi.org/10.1080/07448481.2018.1462826

Wayment, H. A., Wiist, B., Sullivan, B. M., & Warren, M. A. (2011). Doing and being: Mindfulness, health, and quiet ego characteristics among Buddhist practitioners. *Journal of Happiness Studies, 12*, 575–589. https://doi.org/10.1007/s10902-010-9218-6.

Wayment, H. A., Bauer, J. J., & Sylaska, K. (2015a). The Quiet Ego Scale: Measuring the Compassionate Self-Identity. *Journal of Happiness Studies, 16*, 1–35. https://doi.org/10.1007/s10902-014-9546-z.

Wayment, H. A., Collier, A., Traustadottir, T., Till, R., & Birkett, M. (2015b). Brief quiet ego contemplation reduces oxidative stress and mind wandering. *Frontiers in Psychology: Psychology for Clinical Setting, 6*. https://doi.org/10.3389/fpsyg.2015.01481.

Wayment, H. A., West, T. N., & Craddock, E. B. (2016). Compassionate values as a resource during the transition to college: quiet ego, compassionate goals, and self-compassion. *Journal of the First-Year Experience & Students in Transition, 28*, 93–114.

Wayment, H. A., Al-Kire, R., & Brookshire, K. (2018). Challenged and changed: Quiet ego and posttraumatic growth in mothers raising children with autism spectrum disorder. *Autism*, 1362361318763971. https://doi.org/10.1177/1362361318763971

Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma: Different sides of the same coin or different coins? *Applied Psychology, 56*, 417–427. https://doi.org/10.1111/j.1464-0597.2007.00298.x.

Williams, L. J., Hartman, N., & Cavazotte, F. (2010). Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods, 13*, 477–514. https://doi.org/10.1177/1094428110366036.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14*, 121–141. https://doi.org/10.1037/1072-5245.14.2.121.

Youssef-Morgan, C. M., & Luthans, F. (2015). Psychological capital and well-being. *Stress and Health, 31*, 180–188. https://doi.org/10.1002/smi.2623.

Zeller, M., Yuval, K., Nitzan-Assayag, Y., & Bernstein, A. (2015). Self-compassion in recovery following potentially traumatic stress: Longitudinal study of at-risk youth. *Journal of Abnormal Child Psychology, 43*, 645–653. https://doi.org/10.1007/s10802-014-9937-y.

Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology—A critical review and introduction of a two component model. *Clinical Psychology Review, 26*, 626–653. https://doi.org/10.1016/j.cpr.2006.01.008.