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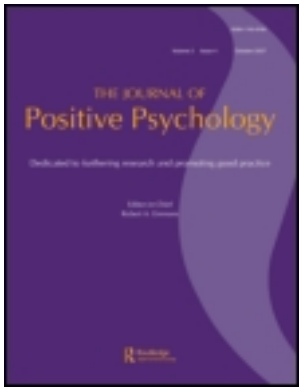

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Are meaning and purpose distinct? An examination of correlates and predictors

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Are meaning and purpose distinct? An examination of correlates and predictors

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Existing empirical literature has typically treated meaning and purpose as identical. Based on previous theoretical propositions of these two constructs as distinct, we hypothesized that meaning (defined as a sense of comprehension and significance in life) and purpose (defined as a sense of goals, aims, and direction in life) would have different predictors and correlates. We utilized a longitudinal design and collected data from 167 cancer survivors at two time points one year apart. Although meaning and purpose were strongly correlated, they had different predictors and correlates. Regression analyses showed Time 2 meaning was predicted by Time 1 spirituality, whereas Time 2 purpose was predicted by Time 1 social support. At Time 2, meaning was positively correlated with posttraumatic growth and negatively with posttraumatic depreciation, whereas purpose was negatively correlated with intrusive thoughts pertaining to cancer. Implications of an understanding of meaning and purpose as distinct constructs are discussed.

Keywords: meaning; purpose; well-being; meaning in life; existential psychology

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In the past few decades, the constructs of meaning and purpose have received increased scholarly attention and have come to be viewed as fundamental to wellness and fulfillment (Reker & Chamberlain, 2000; Wong, 2012). Empirical research has substantiated theoretical claims that a sense of meaning and purpose in life are important to well-being (Ryff & Singer, 2008; Steger, 2009, 2012). Although a wealth of information regarding these two constructs has accumulated over the years, one problem with the literature is that existing treatments of meaning and purpose have considered them to be identical constructs in some instances and distinct constructs in others. Many scholars have outlined meaning and purpose as distinct, yet few empirical studies have directly examined the differences between these two constructs. The current study attempts to explore the differences in predictors and correlates of meaning and purpose.

Why distinguish meaning and purpose?

Scholars have pointed out that although the terms meaning and purpose have been used interchangeably, two distinct underlying constructs have been communicated through the use of these terms (Damon, Menon, & Bronk, 2003, pp. 120–121; Weinstein, Ryan, & Deci, 2012, p. 82). One construct refers to the sense that an individual's life experiences 'make sense' and that s/he lives life in fulfilling ways, while the other represents a sense of goals, aims, and direction in life. Yalom (1980, p. 423) explicitly defined these constructs as distinct – he pointed out that meaning in life refers to the sense of coherence perceived regarding life, whereas purpose refers to intention, aim, or function. In a similar vein, McKnight and Kashdan (2009) conceptualized purpose as a central, self-organizing life aim that is distinct from meaning. According to them, meaning is related more to processing and interpreting reality, whereas purpose is related to motivated planning and acting. Other scholars have conceptualized meaning as the broader construct, one that involves a variety of components such as making sense of one's experiences, coherence, significance, *and* purpose; these conceptualizations consider purpose/goal pursuits as merely *one* of the components of meaning (e.g. Baumeister, 1991; Reker & Wong, 1988). For example, Baumeister (1991) defined meaning as the need to make sense of life and suggested that purpose is only one of four ways individuals try to make sense of their lives. He defined purpose as the perception of one's activities and life events as related to goals and fulfillment.

Factor analytic evidence offers some support for the idea that the two underlying constructs behind the terms meaning and purpose may not be interchangeable. Morgan and Farsides (2009) factor analytically derived a multidimensional measure of meaning that consists of five dimensions, only one of which they refer to as purpose. This purpose subscale contains items referring to goals, aims, mission, and direction. In contrast, the other subscales consist of items tapping constructs such as having a sense of significance regarding one's life.

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Based on previous theoretical propositions (e.g. Baumeister, 1991; McKnight & Kashdan, 2009; Yalom, 1980), the current study conceptualizes meaning and purpose as distinct constructs. Meaning is conceptualized as the subjective experience of perceiving life as fitting into a larger context and finding significance in it (Yalom, 1980). Individuals experiencing meaning are able to feel a sense of comprehension and significance in their lives and feel that life as a whole 'makes sense' (Baumeister, 1991). In contrast, purpose is the subjective experience of possessing a system of overarching goals that provide a sense of direction in life (McKnight & Kashdan, 2009). Purposeful individuals have an attitude towards the future characterized by a sense of enthusiasm and excitement. They see the future as promising and their current actions as leading to such a positive future state.

When meaning and purpose are thus distinctly conceptualized, it is easier to see that differentiating between meaning and purpose is not merely a matter of semantics. As the underlying constructs are different, the roles that they play in individuals' lives, and the pathways through which they are linked to relevant variables such as well-being, are likely different. For example, when meaning is conceptualized as referring to comprehension, significance, and making sense, it maps on well to the accumulating literature on the meaning maintenance model (Heine, Proulx, & Vohs, 2006; Proulx & Heine, 2010). According to this model, people are motivated to 'perceive events through a prism of mental representations of expected relations that organizes their perceptions of the world' (Heine et al., 2006, p. 88). Such expected relations help individuals predict and control the events in their lives and facilitate coping with distressing events and information. The model predicts that violations of expectations result in aversive feelings that motivate compensatory behaviors.

In contrast to meaning, purpose fits well with models of behavioral self-regulation that emphasize the importance of identifying valued goals (e.g. Carver & Scheier, 1998). Being engaged and committed to goals, and disengaging and reengaging as appropriate, is vital to health and well-being (Maes & Karoly, 2005). Purpose – an overarching sense of goals and direction in life – may help organize and stimulate goals when individuals are confronted with threats to their goals (McKnight & Kashdan, 2009). Having a sense of purpose may help sustain motivation in the face of adverse circumstances (McKnight & Kashdan, 2009) and help individuals stay behaviorally engaged in life (Scheier et al., 2006).

Moreover, the constructs of meaning and purpose may be differentially relevant in different contexts. For example, in the aftermath of trauma, individuals struggle with a sense of comprehension and personal significance regarding the traumatic event (Janoff-Bulman, 1992). Victims try to make sense of the occurrence of the event, and try to create a sense of value and significance in their lives (Janoff-Bulman & Yopyk, 2004). Thus, in the aftermath of trauma, individuals seem to be struggling more with regaining a sense of meaning than a sense of purpose. Therefore, to develop a nuanced and accurate understanding of meaning and purpose, it may be important for future work to distinguish them.

At this point, it is important to emphasize that while we argue that meaning and purpose are distinct, we maintain that they are closely related. For instance, having goals to which one is committed and having a sense of direction (purpose) will likely generate a sense of significance and value in life (meaning; Emmons, 2003). However, although they are closely related, the presence of one may not guarantee the other. For example, an individual who is concerned with climbing the career ladder may generate a system of goals and hence possess a strong sense of purpose, but these goals may or may not in turn contribute to a sense of comprehension and understanding regarding life (i.e. meaning).

Current study

The current study attempts to compare the constructs of meaning and purpose in a longitudinal design using two measures of meaning and purpose that map on to the conceptual distinctions posited here. This study asks two questions: (1) Do meaning and purpose have different predictors? (2) How are meaning and purpose differentially related to well-being?

We examine these questions in a sample of cancer survivors, as questions of meaning and purpose are particularly salient for individuals dealing with crises (see Park, 2012b, for a review). Crises are highly stressful experiences perceived to entail a high probability of damage or loss. A cancer diagnosis can be such an experience as it may violate individuals' goals (Holland & Reznik, 2005) and fundamental beliefs regarding life (Park, 2012a), and thus affect a sense of meaning and purpose.

Measuring meaning and purpose distinctly

There are numerous existing measures that assess meaning and purpose (see Brandstätter, Baumann, Borasio, & Fegg, 2012 for a review), most of which combine the constructs of meaning and purpose (e.g. Crumbaugh & Maholick, 1964). They vary in the degree to which they emphasize elements of meaning and purpose. Two measures that more or less solely focus on either meaning or purpose are the Perceived Personal Meaning Scale (PPMS; Wong, 1998) and the Purpose subscale of the Ryff Psychological Well-Being Scales (Ryff, 1989). Both appear to have face validity in their ability to assess meaning and purpose distinctly. The items comprising the versions of both scales used in the current study are listed in Table 1.

Although in her description of the Purpose subscale, Ryff (1989) used the terms meaning and purpose interchangeably, items on the scale indicate that the scale

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Table 1. Versions of the Ryff Purpose subscale and Perceived Personal Meaning Scale used in current study.

Ryff Purpose subscale	Perceived Personal Meaning Scale
I live life one day at a time and do not really think about the future (reverse scored)	Feel your life as a whole has meaning
I tend to focus on the present, because the future nearly always brings me problems (reverse scored)	Derive a great deal of meaning from your past life
My daily activities often seem trivial and unimportant to me (reverse scored)	Find your life very meaningful
I do not have a good sense of what it is I am trying to accomplish in life (reverse scored)	Look forward to a meaningful life in the future
I used to set goals for myself, but that now seems like a waste of time (reverse scored)	
I enjoy making plans for the future and working to make them a reality	
I am an active person in carrying out the plans I set for myself	
Some people wander aimlessly through life, but I am not one of them	
I sometimes feel as if I have done all there is to do in life (reverse scored)	

focuses on purpose – the items directly refer to goals, aims, a sense of direction, and behavioral engagement with current activities. In contrast, items on the PPMS refer specifically to meaning, using the term 'meaning' – the four items ask subjects about the degree to which they feel that their present, past, future, and overall life has 'meaning' or feels 'meaningful.' But how can we be sure that the PPMS' use of the term meaning fosters participants' focus on the underlying construct of meaning and not purpose? If experts use these terms interchangeably, would the PPMS' use of the term meaning instead of purpose make any substantive difference to participants? How can we be sure that participants are not rating their sense of goals, aims, and direction in life (i.e. their purpose)? There is evidence to suggest that the term meaning represents more than merely a sense of goals, aims, and direction for individuals. For example, Wong (1998) asked lay people to describe their conceptions of an 'ideally meaningful life.' Participants' descriptions consisted of a whole host of topics that are distinct from what we refer to here as purpose – participants wrote about having religious beliefs, intimate relationships, a sense of transcendence, being treated fairly, and living life in fulfilling ways. Therefore, when the term meaning is being used, people seem to think beyond mere goals and a sense of direction. Thus, the PPMS appears to tap meaning, whereas the Ryff Purpose subscale appears to tap purpose.

Expected differences and similarities between meaning and purpose

Considering the conceptual differences between meaning and purpose, we hypothesized that they will have different predictors. In particular, we hypothesized that religion and spirituality will be more predictive of meaning than of purpose. Religion and spirituality offer a comprehensive framework to understand life and one's existence and thus provide a sense of meaning (Park, 2005). Religion and spirituality address existential questions (Batson & Stocks, 2004) and allow for a sense of transcendence, thus conferring a sense of significance regarding one's life (Steger, 2012). Although religion and spirituality may also provide features of purpose such as a sense of direction and enthusiasm regarding the future (Emmons, 2005), this seems to be a less salient function of religion and spirituality than the provision of a sense of comprehension and understanding regarding life (Park, 2013; Park, Edmondson, & Hale-Smith, 2013).

Another two predictors that we expected to differentially predict meaning and purpose were optimism and pessimism. Optimism and pessimism can be defined as generalized expectancies regarding outcomes (Scheier & Carver, 1985). Optimists have generally positive expectations regarding the future, whereas pessimists have negative ones. Characteristics of purpose such as goals, aims, and a sense of direction in life are highly influenced by what one expects of the future and how s/he expects things to turn out. In fact, studies have shown that the positive and negative expectations that are characteristic of optimists and pessimists affect how they construe their goals and pursue them (e.g. Jackson, Weiss, Lundquist, & Soderlind, 2002). Optimists see their goals as more attainable whereas pessimists perceive more difficulties (Carver & Scheier, 2002). Thus, optimism and pessimism might be linked to individuals' sense of purpose in life via their effects on expectations. Therefore, we hypothesized that optimism and pessimism would be more predictive of purpose than of meaning.

Crises such as cancer can violate individuals' core beliefs and goals (Holland & Reznik, 2005; Park, 2012a). For example, the goal of living a physically active life and/or the belief in a safe world maybe violated by a cancer diagnosis. We expected participants' perception of their cancer diagnosis as violating their core beliefs and goals to differentially predict meaning and purpose. We expected the perception of *belief* violations to be inversely predictive of meaning as core beliefs help individuals' comprehend and understand their lives (Janoff-Bulman, 1992; Koltko-Rivera, 2004; Park, 2010) and thus provide a sense of meaning. In contrast, we expected the perception of *goal* violations to be inversely predictive of purpose as core goals are

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characteristic of a sense purpose (McKnight & Kashdan, 2009; Ryff, 1989).

Social support was expected to be differentially predictive of meaning than of purpose. Close relationships can add a sense of value and significance to one's existence and make people feel that life is worth living (Debats, 1999; Yalom, 1980). Past research has shown that when people are asked to describe an ideally meaningful life, relationships with others are often described as a primary source of meaning (e.g. Wong, 1998). We therefore expected social support to be more closely associated with meaning than with purpose.

Finally, we expected past experiences with crises to be more predictive of meaning than of purpose. Crises are highly stressful experiences that can violate individuals' perception of their lives and life experiences as comprehensible (Janoff-Bulman, 1992; Park, 2010). In the aftermath of crises, individuals struggle to find a sense of significance and understanding regarding the event and their lives (Janoff-Bulman & Yopyk, 2004). We expected this process of violation to be more closely associated with meaning than with purpose, as a sense of comprehension and understanding regarding life is central to meaning. Therefore, in our sample, we expected participants' past experiences with crises to be inversely predictive of meaning.

Just as we hypothesized meaning and purpose to have differential relationships with predictors, we expected them to have differential relationships with well-being variables. Firstly, we expected meaning to be more closely associated with participants' current experience with their cancer diagnosis. Theoretical models of adjustment to crises suggest that individuals who perceive the event as more violating of their worldviews are more likely to experience distress (e.g. Park, 2010). Individuals who perceive their experience as incomprehensible and report having trouble 'making sense' of it have more difficulties adjusting (Currier, Holland, & Neimeyer, 2006; Holland, Currier, & Neimeyer, 2006; Pakenham, 2008). Therefore, we expected that participants' current experience of psychological distress associated with their cancer experience would be more closely tied to meaning than to purpose.

Two other well-being variables that we expected to be differentially associated with meaning and purpose are posttraumatic growth and posttraumatic depreciation – specifically, we expected posttraumatic growth and depreciation to be more closely associated with meaning than with purpose. Posttraumatic growth refers to the positive changes that arise in response to a major life crisis (Calhoun, Cann, Tedeschi, & McMillan, 2000) and posttraumatic depreciation refers to the corresponding negative changes (Cann, Calhoun, Tedeschi, & Solomon, 2010). Crises can be discrepant with individuals' ability to see their experiences as comprehensible and understandable. In the aftermath of crises, individuals struggle to make sense of their experience – to incorporate their experience into a coherent worldview – so that they are able to regain a sense of comprehension and understanding regarding their lives (Janoff-Bulman, 1992; Park, 2010). This process sometimes involves posttraumatic growth as it allows them to make sense of their experience and to gain a sense of significance regarding the event and their lives (Janoff-Bulman & Yopyk, 2004). Posttraumatic growth helps individuals answer fundamental questions regarding the experience such as 'why did the event happen?' and 'what for?' (Davis, Nolen-Hoeksema, & Larson, 1998). Therefore, we expected those participants who perceived more growth in response to their cancer diagnosis to have a greater sense of meaning. Similarly, we expected posttraumatic depreciation to hinder individuals' ability to make sense of their experience, and thus hinder a sense of meaning. While posttraumatic growth and depreciation may also include changes to individuals' goal systems (Tedeschi & Calhoun, 1996), the struggle to make sense of one's experience seems most salient in the aftermath of trauma. Therefore, we hypothesized that posttraumatic growth and depreciation would be more strongly associated with meaning than with purpose.

Lastly, we expected that meaning and purpose would be similar in their relations with the well-being variables of life satisfaction and affect. Life satisfaction is the cognitive judgment of one's life circumstances as compared to one's own standards (Diener, Emmons, Larsen, & Griffin, 1985). A sense of significance and understanding regarding life (meaning) and a sense of direction and overarching goals (purpose) may both help lead to a positive life satisfaction judgment that one's life circumstances are as they should be (Steger, 2012). There seems to be few reasons to expect meaning and purpose to be differentially related to life satisfaction. Similarly, a sense of meaning and a sense of purpose may both generate and facilitate feelings of positive affect. During stressful and adverse circumstances, a sense that one's life makes sense and is of significance (meaning) can serve as a positive resource (Frankl, 1963) thus facilitating the ability to experience positive affect. A purposeful life may contribute to positive affect by allowing individuals to stay motivated and continue pursuing their goals in the face of adversity (McKnight & Kashdan, 2009).

Method

These analyses were part of a larger investigation of cancer survivorship and psychosocial variables related to quality of life in young to middle-aged adults. Inclusion criteria were having been diagnosed with cancer one to three years prior to recruitment and being between 18 and 55 years of age. Participants were identified through the Cancer Registry at Hartford (CT) Hospital. At Time 1, 600 questionnaires were sent to potential participants via US mail, and 250 were returned completed. One year

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later (Time 2), follow-up packets were mailed to the entire initial sample, of which 167 were returned.

Participants

Present analyses were conducted only for participants who responded at both Time 1 and Time 2. Information regarding the complete Time 1 sample can be found in Edmondson, Park, Blank, Fenster, and Mills (2008). The Time 2 sample consisted of 108 women and 59 men with a mean age of 46.34 (SD = 6.29). Mean years since cancer diagnosis was 3.5 (SD = 1.7) and mean years since completing primary treatment were 2.6 (SD = 1.6). The sample was mostly White (89%), married or cohabiting (73%), college educated or higher (71%), and financially secure (83% had household incomes of at least $50,000). Denominational affiliations were as follows: Catholic (43%), Protestant Christian (30%), 'none' (19%), Jewish (4%), or another affiliation (4%). Primary treatments for cancer were: surgery only (53%), chemotherapy only (5%), combination of surgery and radiation (12%), and combination of chemotherapy, surgery, and radiation (23%). Most common cancer sites in the sample were breast (47%), prostate (12%), colon/rectal (6%), lymph nodes (5%), and cervix/uterus (4%).

Measures

Demographics and cancer related information

At Time 1, participants reported on demographics and specifics regarding their cancer diagnosis such as cancer type, treatments, age at diagnosis, and time since diagnosis and primary treatment. At Time 2, participants reported on recurrence of cancer.

Measures of Time 1 predictors

Religiousness was assessed using a single-item measure from the Overall Self-Ranking section of the Brief Multidimensional Measure of Religiousness/Spirituality (Fetzer Institute/National Institute on Aging Working Group [Fetzer/NIA], 1999). This measure is intended to capture participants' self-perceptions of their overall religiosity. Participants responded to the question, 'To what extent do you consider yourself a religious person.' Responses were rated on a four-point scale that ranged from *very religious* to *not at all religious.*

Spirituality was assessed using the Daily Spiritual Experiences subscale from the Brief Multidimensional Measure of Religiousness/Spirituality (Fetzer Institute/National Institute on Aging Working Group [Fetzer/NIA], 1999). This subscale consists of six items rated on a six-point scale ranging from *many times a day* to *never or almost never.* Sample items include 'I feel God's presence' and 'I feel deep inner peace or harmony.' Studies have shown good reliability and validity data for the scale (e.g. Underwood & Teresi, 2002).

The Interpersonal Support Evaluation List (ISEL) assesses participants' perception of the availability of social support (Cohen, Mermelstein, Kamarck, & Hoberman, 1985). The shortened form of this measure consists of 12 items rated on a four-point scale that ranged from *definitely false* to *definitely true*. Sample items include 'If I were sick, I could easily find someone to help me with my daily chores' and 'If I wanted to have lunch with someone, I could easily find someone to join me.'

The Goals subscale and the Beliefs subscale from The Meaning Assessment Scale (Park, 2008; Park & Edmondson, 2009) were used to measure the degree to which the diagnosis of cancer violated participants' core beliefs and goals. The Beliefs subscale asked participants the degree to which cancer violated a sense of control over one's own life, a sense of the world as fair/just, a sense that god is in control, and a sense that the medical profession has control of one's health. The Goals subscale asked the degree to which cancer interfered with goals pertaining to 12 various life areas (e.g. physical health, personal achievement, and financial security). All items were rated on a four-point scale that ranged from *not at all* to *very much*.

The Life Orientation Test-Revised (LOT-R; Scheier, Carver, & Bridges, 1994) assessed participants' dispositional optimism and pessimism. The LOT-R is a widely used measure that consists of 10 items rated on a five-point scale ranging from *strongly disagree* to *strongly agree.* Three of the items were positively worded, three negatively worded, and four were fillers. The positively worded items were used to calculate optimism and the negatively worded items were used to calculate pessimism (per Herzberg, Glaesmer, & Hoyer, 2006). Psychometric data suggesting independence of the optimism and pessimism factors exists for the scale (Herzberg et al., 2006).

The Stressful Life Experiences Screen (SLES; Stamm et al., 1996) assessed the number of lifetime experiences with crises. The SLES is based on theoretical and empirical conceptualizations of highly stressful experiences. The measure includes those experiences that are commonly perceived as 'extreme' or 'high magnitude' and are most likely to affect physical and mental health (e.g. injury, death of a loved one and sexual abuse). Participants were to respond *yes* or *no* to 15 items regarding whether they had experienced the event in question or not.

Time 2 well-being measures

The Intrusions subscale from the Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997) measured the degree to which the cancer experience intruded into participants' consciousness and caused them distress. The IES-R is a widely used 22-item measure of subjective distress caused by traumatic events. The measure consists of three subscales: intrusions, avoidance, and hyperarousal. Only the seven-item Intrusions subscale, which assesses difficulties such as intrusive thoughts, feelings,

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imagery, and nightmares, was used in the current study. Participants were asked to indicate the degree to which each item was true for them in the past week regarding their cancer experience. Sample items include, 'Any reminder brought back feelings about it' and 'Pictures about it popped in my head.' Items were rated on a five-point scale that ranged from *not at all* to *extremely.*

The Positive and Negative Affective Scale (Watson, Clark, & Tellegen, 1988) is a 20-item measure of positive affect (PA) and negative affect (NA). PA and NA reflect dispositional dimensions that account for much of self-rated affect. PA reflects participants' degree of enthusiasm, alertness, and pleasurable engagement. NA reflects distress and unpleasurable engagement and includes mood states such as anger, contempt, guilt, and fear. Participants rated a number of words that described feelings and emotions according to how they feel *generally* on a five-point scale that ranged from *very slightly or not at all* to *extremely.*

The Satisfaction With Life Scale (Diener et al., 1985) is a five-item measure that assesses degree of life satisfaction, a cognitive judgment of where one's life circumstances are compared to one's own standards. Sample items include 'In most ways my life is close to my ideal' and 'The conditions of my life are excellent.' Items were rated on a seven-point scale that ranged from *strongly disagree* to *strongly agree*.

The Perceived Benefits Scale (Carver & Antoni, 2004; Tomich & Helgeson, 2004) was used to assess posttraumatic growth and posttraumatic depreciation. The 15 items asked participants about the degree to which having cancer brought about changes in different life areas such as relationships and appreciation for life. Items were rated on a five-point scale ranging from *much worse now* to *much better now* (per Bellizzi, Miller, Arora, & Rowland, 2007; Frazier, Conlon, & Glaser, 2001). Scores for posttraumatic growth were calculated by recoding items (i.e. ranging from 0 = *no change* to 2 = *much better now*) and then adding them (per Bellizzi et al., 2007; Frazier et al., 2001). Scores for posttraumatic depreciation were calculated in the same fashion (i.e. ranging from 0 = *no change* to 2 = *much worse now*).

Measures of meaning and purpose

Meaning in life was assessed using an abbreviated version of the Perceived Personal Meaning Scale (PPMS; Wong, 1998). Items were rated on a 10-point scale ranging from *not at all* to *extremely.* Good concurrent and predictive validity have been demonstrated for the PPMS (Park, Malone, Suresh, Bliss, & Rosen, 2008; Wong, 1998).

In order to measure purpose, the Purpose subscale of the Ryff Scales of Psychological Well-Being was used (Ryff, 1989). The medium length form of the Ryff Scales consists of 54 items, nine of which measure purpose. Items were rated on a six-point scale ranging from *strongly disagree* to *strongly agree*. Good psychometric properties have been demonstrated for the scale (Ryff, 1989; Ryff & Keyes, 1995).

Results

Attrition

Participants who completed only Time 1 measures were compared with those who completed both Time 1 and 2 measures on all variables of interest, including demographic variables, using t-tests for mean differences on continuous variables and χ^2 tests on categorical variables. No significant differences existed.

Correlations among demographics and meaning and purpose

Meaning and purpose were strongly correlated ($r = 0.61$, $p < 0.01$). *T*-tests and ANOVAs were conducted to see if meaning and purpose varied as a function of demographic variables such as age, gender, ethnicity, socioeconomic status, level of education, and time since cancer diagnosis. No significant results were found in these analyses.

Partial correlations of Time 1 psychosocial predictors with Time 2 meaning and purpose

Given that meaning and purpose were substantially correlated with one another, partial correlations were conducted to tease out the psychosocial predictors of each, controlling for the other. Table 2 lists the results of partial correlations between Time 1 psychosocial variables and Time 2 meaning and purpose. Time 1 religiousness and daily spiritual experiences were positively correlated with Time 2 meaning after controlling for Time 2 purpose. Time 1 interpersonal support and optimism were positively correlated with Time 2 purpose after controlling for meaning, while Time 1 pessimism, lifetime incidence of crises, and appraised goal violations due to cancer were negatively related to Time 2 purpose.

Table 2. Partial correlations of Time 1 psychosocial predictors with Time 2 meaning and purpose.

	Meaning (controlling for purpose)	Purpose (controlling for meaning)
Religiousness	0.19*	−0.03
Spirituality	0.17*	0.06
Interpersonal support	0.11	0.20**
Optimism	0.04	0.24**
Pessimism	0.02	−0.28**
Stressful life experiences	0.08	−0.18*
Goal violations	0.07	−0.21**
Belief violations	0.01	−0.04

Notes: $N = 140$. *$p < 0.05$; **$p < 0.01$.

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Multiple regression analyses of Time 1 psychosocial predictors of Time 2 meaning and purpose

Separate multiple regression analyses were conducted for both meaning and purpose to examine which Time 1 variables remained as unique predictors when examined together. Each analysis included all of the statistically significant relationships found for that variable (meaning or purpose) in the partial correlation analyses. In addition, we included as the first step demographic characteristics in order to take into consideration the effect of age and gender. These results are listed in Tables 3 and 4. Standardized beta weights indicated that Time 2 meaning was significantly predicted by daily spiritual experiences ($\beta = 0.28$, $p < 0.05$). Time 2 purpose was significantly predicted by interpersonal support ($\beta = 0.20$, $p < 0.05$). Pessimism was marginally predictive of Time 2 purpose ($\beta = -0.19$, $p = 0.06$).

Correlations between Time 2 meaning and purpose with Time 2 well-being

Partial correlations were conducted to examine relations between Time 2 meaning and purpose and Time 2 well-being. Results, listed in Table 5, showed that after controlling for purpose, meaning was positively related to posttraumatic growth resulting from cancer, positive affect, and life satisfaction. Meaning was inversely related to posttraumatic depreciation and negative affect. After partialling out meaning, purpose was positively related to positive affect and life satisfaction. Purpose was inversely related to negative affect and intrusions resulting from the cancer experience.

Table 3. Multiple regression analyses of Time 1 psychosocial predictors of Time 2 meaning.

	Meaning		
	B	SEB	Beta
Age	−0.04	0.03	−0.10
Gender	0−.12	0.40	−0.03
Religiousness	0.04	0.30	0.02
Spirituality	0.07	0.04	0.28*

Notes: $N = 158$. *$p < 0.05$.

Table 4. Multiple regression analysis of Time 1 predictors of Time 2 purpose.

	Purpose		
	B	SEB	Beta
Age	−0.09	0.09	−0.08
Gender	−0.51	1.16	−0.03
Interpersonal support	0.23	0.10	0.20*
Stressful life experiences	−0.18	0.32	−0.05
Goal violations	0.03	0.08	0.03
Optimism	1.33	0.90	0.14
Pessimism	−1.52	0.80	−0.19

Notes: $N = 150$. *$p < 0.05$.

Table 5. Partial correlations of Time 2 meaning and purpose with Time 2 well-being.

	Meaning (controlling for purpose)	Purpose (controlling for meaning)
Intrusions	−0.09	−0.20**
Posttraumatic growth	0.32**	−0.13
Posttraumatic depreciation	−0.31**	−0.13
Positive affect	0.50**	0.40**
Negative affect	−0.21**	−0.36**
Satisfaction with life	0.38**	0.33**

Notes: $N = 152$. *$p < 0.05$; **$p < 0.01$.

Discussion

The present study explored the differences between meaning and purpose. We proposed at the outset that meaning refers to a sense of comprehension, significance, and the experiencing of life as making sense, whereas, purpose refers to a sense of core goals, direction in life, and enthusiasm regarding the future. We hypothesized that as meaning and purpose are distinct constructs, they would have different predictors and relationships with well-being. The results offered support for this hypothesis.

Consistent with the definition of meaning as referring to comprehension and significance, partial correlations showed that Time 2 meaning was positively related to Time 1 religiousness and spirituality (whereas Time 2 purpose was not). Religion and spirituality offer comprehensive frameworks to understand and comprehend one's existence and thus provide meaning (Park, 2005; Silberman, 2005). As this is a more salient function of religiousness and spirituality than the provision of a sense of goals and enthusiasm and excitement regarding the future, it is to be expected that religion and spirituality would be more closely associated with meaning than with purpose (Park, 2013; Park et al., 2013). Also consistent with the idea that comprehension and significance are more defining of meaning than purpose were the partial correlations that showed a positive relationship between Time 2 posttraumatic growth and Time 2 meaning and a negative relationship between Time 2 posttraumatic depreciation and Time 2 meaning (no relationships were found between purpose and these two variables). After an experience of crisis, individuals struggle to make sense of their experience, and to incorporate their experience into their worldview (Janoff-Bulman, 1992; Park, 2010). This process may be accompanied by growth in various aspects of their lives (Tedeschi & Calhoun, 1996) as it allows individuals to make sense of their experience and gain a sense of significance

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regarding the event and their lives (Janoff-Bulman & Yopyk, 2004). Posttraumatic growth helps individuals answer fundamental questions regarding the experience such as 'why did it happen?' and 'what for?' (Davis et al., 1998). Similarly, posttraumatic depreciation may hinder participants' ability to make sense of their experience and thus lower meaning. In our sample, individuals who perceived more growth following their cancer diagnosis had a greater sense of meaning and those who perceived more depreciation had a lower sense of meaning, supporting the idea that part of meaning is the ability to make sense of one's life and life events.

Consistent with the definition of purpose as a sense of goals, direction, and enthusiasm regarding the future, partial correlations showed that Time 2 purpose was positively associated with Time 1 optimism and negatively associated with Time 1 pessimism (Time 2 meaning was not related to either of these variables). It seems that in our sample, individuals who had more positive expectations of the future (optimists) also experienced more purpose in life. Furthermore, Time 1 goal violations pertaining to cancer were also inversely predictive of Time 2 purpose (but not of Time 2 meaning). Survivors who perceived their cancer experience as violating their goals perceived less purpose one year later, supporting the idea that goals are more central to the experience of purpose than of meaning.

Regression analyses examining the unique predictors of Time 2 meaning and purpose offered support for our hypotheses as well, as meaning and purpose had different predictors. For Time 2 meaning, Time 1 spirituality emerged as a unique predictor. The spirituality measure that we used captured subjects' perception of the transcendent (God, the divine) in daily life and the degree to which s/he feels involved with the transcendent (Underwood & Teresi, 2002). The fact that experiencing the transcendent uniquely predicts meaning is consistent with the idea that meaning refers to a sense of understanding and significance regarding life. In contrast to meaning, regression results showed that Time 2 purpose was uniquely predicted by Time 1 interpersonal support and marginally (inversely) predicted by pessimism. The marginally significant inverse prediction of purpose by pessimism is consistent with the definition of purpose as a sense of goals, direction in life, and enthusiasm regarding the future. Pessimists have generalized expectations regarding outcomes that are negative (Scheier & Carver, 1985). Individuals with such negative expectations perceive more difficulties regarding their goals and more readily disengage from them (Carver & Scheier, 2002). Such a scenario is likely to result in a lower sense of purpose.

Some of the results were inconsistent with our expectations. The fact that regression analyses showed interpersonal support as a unique predictor of purpose but not of meaning was surprising considering that social relations are a primary source of meaning in individuals' lives (Debats, 1999; Wong, 1998). Close relationships can add a sense of value and significance to one's existence and make people feel that life is worth living (Yalom, 1980). However, the lack of an association between meaning and interpersonal support in the regression analyses may be due to the fact that perceptions of interpersonal *support* are not identical to perceptions of social *connectedness*. Our measure of support gauged the potential availability of social resources such as instrumental aid, availability of someone to talk to about one's problems, and availability of a positive reference when comparing oneself with others (Cohen et al., 1985). Purpose, which is characterized by a sense of goals, aims, and enthusiasm regarding the future, is likely facilitated by the sense that one has the necessary social resources. In fact, in the past, social support has been associated with greater goal continuity (Robbins, Lee, & Wan, 1994). We suspect that if we had used a measure that gauged social connectedness rather than social support, we would have seen a closer relationship with meaning than with purpose.

Another finding that was inconsistent with our expectations was the lack of a relationship between Time 2 meaning and Time 1 belief violations pertaining to the cancer diagnosis. As core beliefs help individuals comprehend and understand their experiences (Janoff-Bulman, 1992; Koltko-Rivera, 2004; Park, 2010), we expected a negative relationship between belief violations and meaning. It is unclear why the results were inconsistent with this notion. Perhaps other core beliefs besides the four that we assessed are important to the experience of meaning. The types of core beliefs that are crucial to the experience of a sense of meaning require further exploration (for a review of other core beliefs, see Koltko-Rivera, 2004).

An intriguing aspect of our results was the set of relationships between meaning and purpose and crises. On the one hand, Time 2 posttraumatic growth and posttraumatic depreciation following one's cancer diagnosis was correlated with Time 2 meaning but not with Time 2 purpose. On the other hand, Time 2 intrusive thoughts pertaining to the cancer experience was correlated with Time 2 purpose but not with Time 2 meaning. Lifetime incidence of crises measured at Time 1 also negatively correlated with Time 2 purpose but not with Time 2 meaning. This begs the question, are crises and the consequences of crises related more to meaning or to purpose? But perhaps this question assumes too simplistic a relationship between meaning and purpose and crises. In fact, there are many possibilities regarding the nature of their relationship. It is possible that different aspects of highly stressful experiences and their after-effects have different relationships with meaning and purpose. Meaning and purpose may be differentially disrupted depending on the circumstances surrounding crises. It is also possible that meaning and purpose differ in their stability. Perhaps, purpose is more susceptible to being disrupted by stressful experiences, whereas meaning is

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more impervious. Such possibilities may interact with other factors such as the intensity of the event and coping methods in determining the role of meaning and purpose in crises. Of course, these ideas are purely speculative at this point. Future research is needed to explore these issues to better understand the relationship between meaning and purpose and crises.

Our analyses also showed that meaning and purpose were not related to demographic variables such as socioeconomic status and level of education. Socioeconomic status and level of education have been associated with purpose in the past (Ryff & Singer, 2008). Higher economic opportunities and educational standing may allow individuals to pursue personally valued goals and paths and thus confer an increased sense of purpose (Ryff & Singer, 2008). One possibility as to why we did not find a similar relationship is that the diagnosis of cancer may have affected this relationship. Crises and other difficult experiences could cause changes in sources of meaning and purpose (Tedeschi & Calhoun, 1996). They could result in the discovery and commitment to meaningful and purposive aspects of one's life regardless of one's life circumstances (Frankl, 1963) – aspects which transcend the material realm and that are less dictated by socioeconomic and educational standing (e.g. spiritual beliefs and social connections). From an existential standpoint, the experience of cancer may put individuals on an 'equal playing field,' and this may explain why we did not find a relationship between meaning and purpose and socioeconomic status.

Study limitations and future directions

The study limitations must be acknowledged. Firstly, our sample was mostly White, Christian, and college educated. This could limit the generalizability of the present findings. Cultural factors shape the way individuals construct reality and their place in it (Sue, 1978). Cultural factors determine what is deemed as valued and can determine individuals' goals (Markus & Kitayama, 1991; Schwartz, 2004). Considering such variability, it is important that future research assess the degree to which cultural factors may differentially affect meaning and purpose. Secondly, as data were collected in a self-report format, the scores may not be accurate. Although meaning and purpose are subjective judgments (Hicks & King, 2009), participants may have exaggerated their true felt sense of meaning and purpose. If individuals are motivated to find a sense of meaning and purpose in their lives (Baumeister, 1991; Frankl, 1963), they may have been disinclined to rate their lives as lacking meaning and purpose. Another limitation is sampling bias. Survivors who are adjusting poorly to their cancer diagnosis may have been disinclined to participate in a study on cancer survivorship. Therefore, our sample may not represent the full spectrum of well-being among cancer survivors. Lastly, the choice of measures of meaning and purpose may limit the generalizability of our results. Out of the numerous existing measures, the scales used in this study were chosen as they do not conflate the two constructs. It remains to be seen if other distinct measures of meaning and purpose would yield a similar pattern of relationships as those found here.

Despite these limitations, the current study adds to our understanding of the differential roles that meaning and purpose may play in individuals' lives. The results found here are consistent with the idea that the constructs of meaning and purpose are distinct, as they had different predictors and relationships with well-being. The longitudinal nature of this study also allows for greater confidence in the predictors as it took into account temporal effects and avoided the confound of assessing predictors concurrently with meaning and purpose

Future studies should attempt to replicate and extend these findings. It is important to use other measures of meaning and purpose to see if the distinctions that we found hold up. Studies that examine meaning and purpose in a variety of samples such as individuals dealing with crises and 'every day' populations are necessary. The differential relationships of meaning and purpose to other relevant areas such as motivation, coping, and health and well-being should be explored as well.

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