

# Relationships Between Meaning in Life, Social and Achievement Events, and Positive and Negative Affect in Daily Life

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## Abstract

Research on meaning in life has generally focused on global meaning judgments. This study examined how people's daily experiences, represented by events that occur in daily life, influence their perceived sense of meaning on a daily basis. One hundred sixty-two college students completed daily reports for 2 weeks. We examined the relationships among daily social and achievement events, daily positive and negative affect, and daily meaning in life. In addition, we tested the possible moderating influence of depressive symptoms on these relationships. Positive daily social and achievement events were related to greater daily meaning, above and beyond the contributions of daily positive and negative affect. Negative social and achievement events were related to less daily meaning, and negative achievement events covaried with daily meaning above and beyond positive and negative affect. Depression moderated the relationships between positive events and meaning, such that people who reported more depressive symptoms had greater increases in daily meaning in response to positive social and achievement events than individuals who reported fewer symptoms. These findings suggest the important role that daily events may play in fluctuations in people's affective experiences and sense of meaning in life.

For the meaning of life differs from man to man, from day to day and from hour to hour. What matters, therefore, is not the meaning of life in general but rather the specific meaning of a person's life at a given moment.

—Viktor Frankl (1959, p. 49)

Meaning in life (MIL) refers to “the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceive themselves to have a purpose, mission, or over-arching aim in life” (Steger, 2009, p. 682). The growing literature on MIL spans a range of theoretical perspectives and methodologies, and a comprehensive review of this literature is beyond the scope of this article. Nevertheless, most definitions of MIL converge on the concept of sense making—people perceive their lives as meaningful when they are able to explain and understand their experiences (Proulx, Markman, & Lindberg, 2013). This drive to find meaning in personal experiences was described as mankind's primary purpose by Frankl (1959), who called it a “will to meaning.”

Though there is a substantial and growing empirical literature on MIL, research has focused primarily on global perceptions of meaning (for a review, see Steger, 2012). Though it is

important to understand how people come to believe that their lives as a whole have meaning, a global judgment of MIL is different from experiencing daily life as meaningful. Although global MIL is relatively stable (Steger & Kashdan, 2006), several daily diary studies have shown that MIL can fluctuate on a daily basis (Kashdan & Steger, 2007; King, Hicks, Krull, & Del Gaiso, 2006; Steger & Frazier, 2005; Steger & Kashdan, 2013; Steger, Kashdan, & Oishi, 2008). For example, King et al. (2006) found that the majority of variability in MIL judgments was within people (82%) rather than between people, highlighting the necessity of attending to within-person variations in daily MIL. Using such results as a starting point, the current study used a daily diary method to measure variations in daily MIL. This contextualized approach is an alternative to traditional global assessments of MIL that by

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definition do not capture potentially important within-person variability in meaning judgments.

## Meaning in Life as a Daily Experience

We characterize the presence of global MIL as perceiving that your life fits in with a larger purpose when answering the question, “How meaningful is my life?” Perceptions of meaning on a daily basis should represent the degree to which someone understands his or her daily experiences to fit into his or her existence as a whole. We argue that this is an understudied and potentially crucial aspect of the construct of MIL. Rather than considering a general, unspecific type of meaning (the kind assessed by global questionnaires), we are seeking to understand the type of meaning that people construct in the context of their actual daily experiences. Research shows that detecting MIL is a relatively common experience, suggesting that there are common sources of MIL available to us on a ready basis (Heintzelman & King, 2014). This daily sense of meaning should be dynamic, constantly ebbing and flowing with ordinary life events. Experimental research supports this notion by demonstrating that MIL can change in response to even mild positive experiences (Hicks & King, 2009b).

The distinction between the meaning of particular daily life experiences and the meaning of life in general resembles the difference between global and situational meaning outlined by Park and others (Park, 2010; Park & Folkman, 1997). A person’s global sense of MIL should influence how he or she evaluates the meaning of his or her daily experiences. Indeed, past research has found that daily and global MIL are positively related ( $r = .55$ ; Steger et al., 2008). Feeling as if your life matters in the moment is influenced by your sense of how much your life matters as a whole, but daily MIL is more sensitive to the mundane experiences that characterize day-to-day living. If MIL does indeed change on a daily basis, we need to explore the contextual and situational variables that might influence these fluctuations.

## Sources of Daily Meaning

Though there is no universal consensus on how to best achieve a sense of MIL, there are useful perspectives that can guide our discussion of MIL as a daily experience. Some argue that people look for meaning in their daily experiences just as they do in their lives generally, and that the same factors that influence global perceptions of meaning should impact daily perceptions (Sommer, Baumeister, & Stillman, 2013). Baumeister (1991) proposed four motives that underlie people’s perceived MIL—purpose, value, efficacy, and self-worth. As these four essential needs are fulfilled, a sense of MIL is established. The need for purpose emphasizes the importance of a goal orientation to organize behavior and motivate personal choices. Other theorists also advocate for the relevance of achieving important life goals (Klinger, 1977) and perceiving a clear

sense of purpose for a meaningful life (McKnight & Kashdan, 2009). Values, also emphasized by Frankl (1959), provide individuals with a framework to organize and justify their actions in a way that promotes a sense that their behavior is moral and right (Baumeister & Newman, 1994).

Along with purpose and values, people need to believe that they have efficacy (control) over their life events. People who lack self-efficacy may experience their lives as incomprehensible, give up in the face of difficulties, and struggle to maintain psychological health and well-being (Bandura, 1994). Finally, a sense of self-worth is necessary for people to believe that they have positive value as a person, and this contributes to MIL (Battista & Almond, 1973; Scannell, Allen, & Burton, 2002; Schlegel, Hicks, King, & Arndt, 2011). People want to feel as though they are worthy individuals, and when they have experiences that threaten the image of themselves as a person of value, MIL is disrupted (Stillman et al., 2009). The importance of maintaining a positive self-image for strengthening one’s faith in a meaningful existence is also consistent with terror management theory (TMT; Becker, 1973; Greenberg, 2012). From this perspective, self-esteem is thought to promote a stable view of the world and self and thus may contribute to perceptions of MIL. Taken together, these four essential needs help people construct meaning from their experiences.

We were interested in knowing how people’s daily experiences, represented by the events that occur in their daily lives, would influence their perceived MIL. More specifically, we thought it would be useful to differentiate the social and achievement domains, a distinction that harkens back at least to Freud’s “Arbeiten und Lieben.” Relationship experiences and achievement-related activities are included in consensus constructions of the “taxonomy of meaning” (Emmons, 2003, p. 108) and contribute to global perceptions of MIL (Debats, 1999; Lambert et al., 2010). One aspect of relationships, social support, has been shown to be positively related to MIL across the life span (Steger et al., 2008). In experimental research, excluded people tend to rate life as less meaningful than control participants (King & Geise, 2011; Twenge, Catanese, & Baumeister, 2003; Williams, 2007).

Successful social events may be particularly important for fulfilling the need for self-worth. The sociometer model of self-esteem, an indicator of perceptions of self-worth, views self-esteem as an internal barometer measuring interpersonal appeal, which rises and falls depending on social experiences (Leary, Tambor, Terdal, & Downs, 1995). Consistent with this hypothesis, Nezlek (2005) reported results across seven samples demonstrating that at the within-person (daily) level, self-esteem was positively related to the numbers of positive social events people reported and was negatively related to the number of negative social events.

Meaning in life can also be sustained through goal achievement and fulfillment (Chamberlain & Zika, 1988). People believe that their lives have meaning and purpose when they are making progress toward their goals (Little, 1998), and

achievement experiences are an important source of self-efficacy and personal meaning (McDonald, Wong, & Gingras, 2012). Personal goals may organize and orient people toward valued activities and provide meaningful justification for their actions (Emmons, 2003). Some motivational theories suggest that successful goal achievement is key to the development and maintenance of well-being (e.g., Diener, 1984; Emmons, 1986; Little, 1998). Daily goal achievement has been found to be positively related to daily well-being (Nezlek, 2005; Sheldon, Elliot, Kim, & Kasser, 2001), and failure in the achievement domain has been found to be negatively related to well-being (Nezlek, 2005). People's daily successes and failures may fulfill or obstruct essential needs for purpose, value, and efficacy, which may in turn increase or decrease MIL. Both relationships and achievements may provide the illusion that your life will have a lasting impact on the world, thereby increasing your perception of how meaningful your existence is (Greenberg, 2012).

### **Affect, Daily Events, and Daily MIL**

The broad benefits associated with MIL (Battista & Almond, 1973; Melton & Schulenberg, 2008; Scannell et al., 2002; Steger & Frazier, 2005) suggest that greater MIL is associated with increased positive affect and reduced negative affect. King et al. (2006, Study 2) found that daily positive affect was positively related to both global MIL and mean daily MIL, and daily negative affect was negatively related to both global MIL and mean daily MIL. It should be noted that MIL and affect were related after controlling for relationships between MIL and goal activity. Other research demonstrates a similar independent relationship between positive affect and MIL, with positive affect partially mediating the relationship between feelings of relatedness and MIL (Hicks & King, 2009a).

However, there is also evidence that MIL is more than an indicator of affect. Research on meaning making in the context of stressful events and suffering has shown that people can find MIL in the absence of positive affect (Park & Folkman, 1997), such as through cancer experiences or the death of a significant other (Park, 2010). Consistent with this possibility, research has found that daily measures of well-being and self-focused constructs covary (at the within-person level) with daily events above and beyond the covariation between daily affect and events (e.g., Nezlek 2005). We assumed that daily MIL would show a similar pattern: covarying with both daily affect and daily events.

### **Depression, Daily Events, and MIL**

Besides the lack of knowledge about meaning as a daily experience, we know little about the personality factors that affect MIL judgments. Depression is associated with lower global MIL (Mascaro & Rosen, 2008; Zika & Chamberlain, 1992), but its influence on the experience of daily MIL is unclear.

Daily process studies have shown that higher levels of depressive symptoms were associated with increased reactivity to daily events (Nezlek & Allen, 2006; Nezlek & Gable, 2001; Nezlek & Plesko, 2003; Peeters, Nicolson, Berkhof, Delespaul, & deVries, 2003) that could affect MIL.

In the social domain, Allen and Badcock (2003) have suggested that depression evolved as a signal to help people maintain membership in important social groups, making people with depressive symptoms more sensitive to social events. Supporting this model, both experimental and daily process studies (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997; O'Neill, Cohen, Tolpin, & Cimboric Gunthert, 2004) have found that depressive symptoms increase reactivity to social events. Further, Steger and Kashdan (2009) found that people with higher levels of depressive symptoms experienced more pronounced fluctuations in daily well-being, including a measure of daily MIL, in response to daily social interactions.

Depressive symptoms may also moderate the effect of daily achievement events on daily MIL. The goal orientation model of depression suggests that a validation-seeking (VS) goal orientation is a risk factor for depression, such that people who rely on successful goal attainment to prove their self-worth may be more likely to develop depression symptoms (Dykman, 1998). The VS goal orientation that may accompany symptoms of depression might increase sensitivity to daily achievement events that threaten or enhance a sense of competence and self-worth. Depressive symptoms may moderate the relationship between daily social and achievement events and daily MIL, such that daily events will have a stronger relationship with daily MIL for those with greater depressive symptoms.

### **The Present Study**

Previous research illustrates a link between life events and MIL, but it has relied on cross-sectional methods, retrospective recall of events, and a focus on global meaning. These methods have limited ecological validity if one wants to understand how people find or create meaning in their daily lives. Moreover, research on life events and MIL tends to overemphasize negative events (e.g., Davis, Morris, & Kraus, 1998; Krause, 2007; Park & Folkman, 1997) and ignore the potential benefits of positive life events on MIL judgments. In this study, we used a daily diary approach, which allowed us to examine how ordinary life events, both positive and negative, covary with MIL judgments in the natural contexts in which they occur.

We addressed two primary questions: What events contribute to daily MIL? And does the presence of depressive symptoms influence how daily events affect daily MIL? This study expands on previous research examining the relationships between daily events and daily well-being (Nezlek, 2005; Nezlek & Plesko, 2003) to include an examination of the relationship between daily events and daily MIL. We hypothesized that positive social and achievement events would be positively related to daily MIL, and negative social and achievement events would be negatively related to daily MIL. Next, we

hypothesized that daily events would covary with MIL above and beyond the contributions of daily affect. Further, we hypothesized that people with greater depressive symptoms would react more strongly to both positive and negative events and experience greater fluctuations in daily MIL.

In addition to these primary aims, we also examined the relative impact of each type of daily event on daily MIL. Given the past findings that negative events have a greater psychological impact than positive events on measures of psychological adjustment (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001), we hypothesized that negative daily social and achievement events should have a greater impact on daily MIL than positive events. Past research on the effects of daily social and achievement events on psychological adjustment has not identified one type of event as more influential than the other, and thus our analyses comparing the impact of social versus achievement events on MIL were exploratory.

## METHOD

### Participants

Participants were 162 college students (68% women;  $M_{\text{age}} = 21.65$ ,  $SD = 2.36$ ; 59% Caucasian, 10% African American, 10% Asian American, 8% Hispanic, 6% Middle Eastern, 1% Native American, and 6% Other) who participated for course credit. Initially, 174 individuals volunteered for the study, but 12 of them did not provide any valid daily diary entries. Five individuals provided fewer than seven valid daily diary entries and were excluded from analyses. We wanted to capture data on how each person experiences daily events, and because people's behavior and psychological experiences are often different on the weekend compared to weekdays, we used 7 days as a cut-off to ensure each participant provided at least 1 week of data, with entries on both weekdays and weekends.

### Procedure

Small groups of participants attended meetings (1.5 hours) during which instructions were given about Web-based daily data collection. After completing a packet of questionnaires, participants were told how to use a secure, dedicated Web site to provide their data each day. They were asked to complete their daily reports between the hours of 6 p.m. and 10 a.m. of the following morning, a time cut-off used in previous daily diary studies with college students (e.g., Farmer & Kashdan, 2012). Date and time stamps were inspected to ensure proper submission. Ninety-nine entries submitted outside the time cut-off were not included in our analyses. The remaining 156 participants provided 2,048 valid daily diary entries ( $M = 13.04$ ,  $SD = 2.19$ ).

### Daily Measures

At the end of each day of the study, participants logged on to a secure Web site to provide daily measures of MIL, positive

and negative social and achievement events, and positive and negative affect. Daily measures used modifications of items from corresponding trait measures reworded for daily administration. This rewording included a specific focus on the day as the unit of analysis. This method of developing state-level analogs of trait measures has been used successfully in the past. See Nezlek (2005) for examples and Nezlek (2012) for a more detailed description of this process.

Daily levels of MIL were assessed with the Daily Meaning Scale (DMS; Steger et al., 2008). The scale consists of two face-valid items: "How meaningful did you feel your life was today?" and "How much did you feel your life had purpose today?" Participants responded on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). These items have demonstrated acceptable reliability and validity in past research (Kashdan & Nezlek, 2012; Kashdan & Steger, 2007). Prior research has found that the daily measure of MIL is correlated from .53 to .64 with trait MIL, as measured by the full version of the Meaning in Life Questionnaire (Kashdan & Steger, 2007; Steger & Kashdan, 2013; Steger et al., 2008). Reliability estimates for daily measures are reported below.

Daily social and achievement events were measured with a modified version of the Daily Events Survey (DES; Butler, Hokanson, & Flynn, 1994). The DES was designed to assess the occurrence of everyday events in the lives of college students and has been used in previous research (e.g., Genet & Siemer, 2012; Nezlek, 2005; Nezlek & Plesko, 2003). A total of 26 events were measured: seven positive-social, seven positive-achievement, six negative-social, and six negative-achievement. Each day, participants rated each event on the following scale: 0 (*did not occur*), 1 (*occurred and not important*), 2 (*occurred and somewhat important*), 3 (*occurred and pretty important*), and 4 (*occurred and extremely important*).

To reduce possible confounds between our measures of meaning in life and daily events, we summarized daily events using frequency counts rather than composite scores (Nezlek, 2012; pp. 34–35). Frequency counts represented the number of events in each category a person described as having had occurred. Composite scores would have been weighted averages of the events in each category, weighted by importance.

We measured daily affect with 12 items, six for positive affect and six for negative affect. For each item, participants answered using a 7-point scale ranging from 1 (*Did not feel this way at all*) to 7 (*Felt this way very strongly*). The items for positive affect were excited, enthusiastic, happy, relaxed, calm, and satisfied. For negative affect, they were nervous, embarrassed, upset, sad, bored, and disappointed. Kashdan and Steger (2007) found that these daily measures of positive and negative affect had corresponding correlations of .48 and .58 with trait levels of positive and negative affect as measured by the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988).



## Trait Measures

The 21-item Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) was used to assess cognitive, somatic, and behavioral indices of depression. Participants selected a statement in each of the symptom categories. This scale is widely used in clinical and research settings to measure depression, and it was reliable in our study ( $\alpha = .90$ ). Participants had an average BDI-II score of 10.77 ( $SD = 8.47$ ).

## RESULTS

### Overview of Primary Analyses

The data were conceptualized as hierarchically nested (i.e., days nested within persons) and were analyzed with a series of multilevel models using the program HLM 6.08 (Raudenbush, Bryk, Cheong, & Congdon, 2004). Our analyses followed guidelines and procedures described by Nezlek (2001, 2011). In addition to the analyses reported below, we examined the moderating roles of age and sex. Neither was found to influence the results reported below, and we do not report the details of these analyses.

### Descriptive Statistics and Reliability of Daily Measures

Table 1 presents the means, standard deviations, and reliability estimates of the daily measures of MIL, social and achievement events, and positive and negative affect. The reliability of the daily measures was estimated using unconditional models with items nested within days, and days nested within people (Nezlek, 2011). These analyses found that the two MIL items and the two sets of affect items formed adequately reliable scales (estimates ranged from .64 to .86). Because the event variables were essentially behavioral recordings, we did not expect them to be internally consistent at the daily level (Stone, Kessler, & Haythomthwatte, 1991), and so we did not compute reliabilities for them. As shown in Table 1, within-person variance was greater than between-person variance for all

variables, demonstrating the importance of investigating these constructs as fluctuating daily states.

### Relationships Between Daily Events and Daily MIL

Our first set of analyses examined relationships between daily meaning in life and the measures of daily positive and negative social and achievement events, separately for each type of event. Events were the predictors and were entered group-mean centered. (In all analyses, Level 1 predictors were entered group-mean centered.) This meant that coefficients described relationships between deviations from a person's mean score on a daily event measure and the outcome measure. The model is below. The null hypothesis in these analyses was that the mean within-person relationship between MIL and a measure of daily events was 0. This was tested by the  $\gamma_{10}$  coefficient in the equations below. In these models, there were  $i$  days nested within  $j$  participants.

Day level:  $y_{ij} = \beta_{0j} + \beta_{1j} (\text{Daily event measure}) + r_{ij}$

Person-level intercept:  $\beta_{0j} = \gamma_{00} + u_{0j}$

Person-level slope:  $\beta_{1j} = \gamma_{10} + u_{1j}$

As predicted, within-person relationships between positive social events and MIL were positive ( $\gamma_{10} = .47$ ,  $t = 10.79$ ,  $p < .001$ ), as were within-person relationships between positive achievement events and MIL ( $\gamma_{10} = .43$ ,  $t = 9.04$ ,  $p < .001$ ). Also as expected, within-person relationships between negative social events and MIL were negative ( $\gamma_{10} = -.22$ ,  $t = -3.56$ ,  $p < .001$ ), as were within-person relationships between negative achievement events and MIL ( $\gamma_{10} = -.38$ ,  $t = -6.66$ ,  $p < .001$ ).

### Construct Specificity: Controlling for Affect

Several researchers have suggested that MIL judgments are heavily influenced by mood (Hicks & King, 2009a), and to examine this possibility, we ran a series of models examining relationships between MIL and our measures of affect. In these

**Table 1** Descriptive Statistics for Daily and Trait Measures

	<i>M</i> ( <i>SD</i> )	Range	Within-Person Variance	Between-Person Variance	Day-Level Reliability	Person-Level Reliability
Meaning in life	8.95	2–14	.54	.46	.86	.92
Positive social events	3.75	0–7	.64	.36	—	.88
Positive achievement events	3.01	0–7	.56	.44	—	.91
Negative social events	1.28	0–7	.53	.47	—	.92
Negative achievement events	2.04	0–7	.56	.44	—	.91
Positive affect	4.19	1–7	.68	.32	.80	.85
Negative affect	2.21	1–7	.66	.34	.64	.87
BDI-II	10.77 (8.47)	0–39	—	—	—	.90

analyses, MIL was the dependent measure and a measure of affect was the predictor. We found that positive affect was positively related to daily meaning ( $\gamma_{10} = 1.24$ ,  $t = 18.69$ ,  $p < .001$ ) and negative affect was negatively related ( $\gamma_{10} = -1.03$ ,  $t = -12.65$ ,  $p < .001$ ).

Given past research on relationships between affect and daily events (e.g., Nezlek, 2005), we tested whether affect was related to daily events. In these analyses, affect was the dependent measure and each type of event was examined separately. Consistent with previous research, these analyses showed that daily positive affect was positively related to positive daily social and achievement events ( $\gamma_{10} = .29$ ,  $t = 15.71$ ,  $p < .001$ ;  $\gamma_{10} = .17$ ,  $t = 8.59$ ,  $p < .001$ ) and was negatively related to negative daily social and achievement events ( $\gamma_{10} = -.18$ ,  $t = -6.43$ ,  $p < .001$ ;  $\gamma_{10} = -.21$ ,  $t = -8.76$ ,  $p < .001$ ). Negative affect was positively related to negative daily social and achievement events ( $\gamma_{10} = .25$ ,  $t = 10.71$ ,  $p < .001$ ;  $\gamma_{10} = .21$ ,  $t = 9.62$ ,  $p < .001$ ) and was negatively related to positive daily social and achievement events ( $\gamma_{10} = -.13$ ,  $t = -8.24$ ,  $p < .001$ ;  $\gamma_{10} = -.09$ ,  $t = -5.82$ ,  $p < .001$ ).

Given that affect was related to MIL and daily events, we tested whether affect could explain the relationships between daily events and daily meaning in life. We did this by adding both daily positive and negative affect to our initial analyses of relationships between events and MIL. In such analyses, if the coefficients for the event variables are no longer significant, it can be assumed that the relationship between daily events and daily MIL is mediated by affect. If relationships between daily

events and MIL remain significant when affect is included in the models, it can be assumed that the covariation between daily events and daily MIL exists independent of daily affect.

Controlling for the relationships between MIL and positive affect ( $\gamma_{10} = 1.04$ ,  $t = 13.01$ ,  $p < .001$ ) and MIL and negative affect ( $\gamma_{20} = -.28$ ,  $t = -3.68$ ,  $p < .01$ ), the relationship between MIL and positive social events remained positive and significant ( $\gamma_{30} = .14$ ,  $t = 3.74$ ,  $p < .001$ ). Controlling for the relationships between MIL and positive affect ( $\gamma_{10} = 1.05$ ,  $t = 14.72$ ,  $p < .001$ ) and MIL and negative affect ( $\gamma_{20} = -.25$ ,  $t = -3.31$ ,  $p < .01$ ), the relationship between MIL and positive achievement events remained positive and significant ( $\gamma_{30} = .22$ ,  $t = 6.12$ ,  $p < .001$ ). In contrast, the coefficient for negative social events was no longer significant ( $\gamma_{30} = .06$ ,  $t = 1.23$ ,  $p = .22$ ) when controlling for positive affect ( $\gamma_{10} = 1.11$ ,  $t = 15.12$ ,  $p < .001$ ) and negative affect ( $\gamma_{20} = -.30$ ,  $t = -3.99$ ,  $p < .001$ ). Controlling for the relationships between MIL and positive affect ( $\gamma_{10} = 1.10$ ,  $t = 14.72$ ,  $p < .001$ ) and MIL and negative affect ( $\gamma_{20} = -.24$ ,  $t = -3.07$ ,  $p < .01$ ), the relationship between MIL and negative achievement events remained negative and significant ( $\gamma_{30} = -.10$ ,  $t = -2.22$ ,  $p < .05$ ). Table 2 displays these results.

### Comparing Relationships Between MIL and Social and Achievement Events

Given that social and achievement events were related to MIL, we tested whether these relationships differed in strength. To

**Table 2** Relationships Between Daily Events and Daily MIL With and Without Controlling for Daily Affect

Outcome: Daily Meaning in Life	Without Affect		With Affect	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Positive events as predictors				
Intercept	8.96	49.29***	8.96	49.34***
Positive social events	.47	10.79***	.14	3.74***
Positive affect	—	—	1.04	13.01***
Negative affect	—	—	-.28	-3.68***
Intercept	8.96	49.30***	8.96	49.35***
Positive achievement events	.43	9.04***	.22	6.12***
Positive affect	—	—	1.05	14.72***
Negative affect	—	—	-.25	-3.31**
Negative events as predictors				
Intercept	8.96	49.28***	8.96	49.34***
Negative social events	-.22	-3.56***	.06	1.23
Positive affect	—	—	1.11	15.12***
Negative affect	—	—	-.30	-3.99***
Intercept	8.96	49.28***	8.96	49.34***
Negative achievement events	-.38	-6.66***	-.10	-2.22*
Positive affect	—	—	1.10	14.72***
Negative affect	—	—	-.24	-3.07**

Note. *b* = unstandardized HLM coefficient.

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

do this, we entered social and achievement events as predictors in the same model and compared the coefficients using a test of fixed effects—testing whether constraining the two coefficients to be equal reduced the model fit (Nezlek, 2011, pp. 25–26, 92–95). When positive social and achievement events were entered together, both were significantly related to MIL, and a comparison of the two coefficients indicated they were not significantly different from each other,  $\chi^2(1) = 1.28$ ,  $p = .26$ . Both negative social and negative achievement events (entered in same model) were significant predictors of meaning. A comparison of the two coefficients indicated they were significantly different from each other,  $\chi^2(1) = 5.88$ ,  $p < .05$ , and the coefficient for negative achievement events was larger than that for negative social events. This suggests that negative achievement events have a greater (negative) influence on daily MIL than negative social events.

### Comparing Relationships Between MIL and Positive and Negative Events

Given that both positive social events and negative social events were related to MIL, we tested whether there were differences in the strength of the relationships between MIL and these two measures. When both were entered in the same model, both were significantly related to predictors of meaning. Moreover, the coefficient for positive social events was larger (in terms of absolute value) than the coefficient for negative social events,  $\chi^2(1) = 12.40$ ,  $p < .001$ . This suggests that positive social events have a greater impact on daily MIL than negative social events. When both positive and negative achievement events were entered in the same model, both were significantly related to MIL, but the absolute values of the two coefficients were not significantly different,  $\chi^2(1) = .97$ ,  $p > .5$ .

### Depressive Symptoms as a Moderator of Relationships Between Daily Events and MIL

We expected that individual differences in depressive symptoms would moderate within-person relationships between MIL and daily events. We examined such possibilities with the model presented below, separately for each type of event. BDI-II scores were standardized prior to analysis.

Day level:  $y_{ij} = \beta_{0j} + \beta_{1j}$  (Daily event measure) +  $r_{ij}$   
 Person-level intercept:  $\beta_{0j} = \gamma_{00} + \gamma_{01}$  (BDI-II scores) +  $u_{0j}$   
 Person-level slope:  $\beta_{1j} = \gamma_{10} + \gamma_{11}$  (BDI-II scores) +  $u_{1j}$

First, BDI scores were negatively related to mean MIL (the intercept in each analysis,  $\gamma_{01} = -.09$ ,  $t = -3.77$ ,  $p < .001$ ). Results indicated that scores on the BDI-II moderated relationships between MIL and daily positive social and achievement events ( $\gamma_{11} = .02$ ,  $t = 3.12$ ,  $p < .01$ ;  $\gamma_{11} = .02$ ,  $t = 3.35$ ,  $p < .01$ ); see Table 3 for results.

The nature of these relationships can be understood by estimating predicted slopes for individuals who had high (one

**Table 3** Depressive Symptoms, Daily Events, and Daily Meaning in Life

Outcome:	Daily Meaning in Life	
	<i>b</i>	<i>t</i>
Positive Events as Predictors		
Intercept	9.91	33.34***
Positive social events	.24	3.29**
BDI-II	-.09	-3.77***
BDI-II $\times$ Positive Social Events	.02	3.12**
Intercept	9.91	33.34***
Positive achievement events	.18	2.40*
BDI-II	-.09	-3.77***
BDI-II $\times$ Positive Achievement Events	.02	3.35**
Negative Events as Predictors		
Intercept	9.91	33.32***
Negative social events	-.31	-3.00**
BDI-II	-.09	-3.77***
BDI-II $\times$ Negative Social Events	.01	.96
Intercept	9.91	33.33***
Negative achievement events	-.40	-4.08***
BDI-II	-.09	-3.77***
BDI-II $\times$ Negative Achievement Events	.00	.16

Note. *b* = unstandardized HLM coefficient.

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

standard deviation above) and low (one standard deviation below) BDI-II scores (Aiken & West, 1991). For a person high in depressive symptoms, the within-person relationship between daily positive social events and meaning was stronger (.26) than for someone low in depressive symptoms (.22). Similarly, for a person high in depressive symptoms, the within-person relationship between daily positive achievement events and meaning in life was stronger (.21) than for someone low in depressive symptoms (.16). Follow-up analyses testing the estimated values for participants one standard deviation above or below the mean found that the estimated slopes for both social and achievement events were significantly different from 0 ( $p < .05$ ). These findings indicate that for individuals with more depressive symptoms, daily positive events had a larger impact on daily meaning in life than they had for people with less depressive symptoms. In contrast, BDI-II scores did not moderate relationships between MIL and daily negative social events ( $\gamma_{11} = .008$ ,  $t = .96$ ,  $p = .34$ ) or achievement events ( $\gamma_{11} = .001$ ,  $t = .16$ ,  $p = .87$ ).

## DISCUSSION

Although MIL is linked to multiple indicators of psychological and physical well-being, little is known about how meaning is constructed in daily life. This study addressed this deficit by demonstrating that perceptions of MIL do in fact ebb and flow over short periods of time, and that these fluctuations may be in response to ordinary daily life events. We also tested whether

individual differences in depression symptoms moderated how daily events relate to daily meaning judgments and found that symptoms of depression were related to increased sensitivity to positive daily events. We believe the results of the present study increase our understanding of how a sense of meaning emerges in daily life.

### Sources of Daily Meaning

Daily social and achievement events were related to daily MIL. The more positive social and achievement events someone experienced, the more meaningful his or her life was on that day. Comparisons of the relative impact of positive social and achievement events indicated they were equivalent in their relationship with daily MIL. That these types of daily experiences boost MIL on a daily basis is consistent with the literature establishing both relationships and achievements as sources of global MIL (Debats, 1999; Krause, 2007; Lambert et al., 2010). People who had more positive daily events perceived their daily lives as more meaningful, suggesting the value of having more daily options for fulfilling needs and perceiving MIL. Experiencing a variety of positive events from which to derive meaning may reduce the risk of hedonic adaptation (Frederick & Loewenstein, 1999).

Daily social and achievement events, even those as mundane as doing something special for a friend or meeting a daily fitness goal, can provide a sense of mattering *in the moment*. Our findings suggest that this sense of mattering extends beyond the contributions of positive affect, which can be a source of meaning on its own (King et al., 2006). In addition to boosting positive affect, these events may fulfill one or more of the basic needs for meaning and promote the impression that a person's individual experiences have an impact on the world around him or her. Connecting with another person, however briefly, or achieving a goal, however small, may increase someone's sense that his or her actions will have value that extends beyond the moment in which those events occur.

Positive social events had a greater impact on daily MIL than negative social events, suggesting that daily MIL may be uniquely tied to the positive aspects of daily social experiences. Many theories suggest social connections are a primary source of well-being and MIL (Baumeister & Leary, 1995; Ryan & Deci, 2000). Aron and Aron's (2013) self-expansion model suggests that close relationships increase efficacy, competence, and overall potential, all thought to contribute to a sense of MIL. It is thus unsurprising that positive daily social events are related to a greater sense of daily MIL.

Given a substantial literature suggesting that negative events have a greater psychological impact than their positive counterparts (e.g., Baumeister et al., 2001), it might seem surprising that positive social events were more strongly related to daily MIL than negative social events. This finding is consistent with other research demonstrating that MIL has a stronger relation with positive dimensions of well-being than negative dimensions of well-being (Scannell et al., 2002; Zika & Chamberlain,

1992). Our work complements past research suggesting that when people consider the meaningfulness of trivial life events such as "saw a good movie" or "got a bad haircut," they tend to ascribe more meaning to positive trivial events than their negative counterparts (King & Hicks, 2009, Study 1). Past research has demonstrated that social exclusion may lead to efforts to restore social connections (Maner, DeWall, Baumeister, & Schaller, 2007); this rebound effect may explain why the relationship between negative social events and daily MIL was not as robust as the link between positive social events and daily MIL. There was no difference in the relative impact of positive versus negative daily achievement events.

The more negative daily social and achievement events someone experienced on a given day, the less MIL he or she perceived on that same day. Negative daily events may disrupt people's meaning systems, particularly when they occur in valued life domains. Comparisons of the impact of negative social and achievement events revealed that negative achievement events had a stronger negative relationship with daily MIL than negative social events. Negative achievement events covaried with MIL independent of daily positive and negative affect, whereas negative social events did not. Undesirable achievement experiences may be particularly salient for the meaning systems of college students, where the environment is one that encourages a task orientation (Duda & Nicholls, 1992).

It is possible that negative daily events prompt compensatory efforts to restore meaning, a rebound effect that has been found in research on experimentally manipulated threats to meaning (Van Tongeren & Green, 2010) and in research on meaning making in the context of negative life experiences (Park, 2010). Our method of assessing MIL at the end of each day may not have captured this dynamic process, and thus the observed effect of negative events on daily meaning may be an underestimation of the true effect. An alternative and more parsimonious explanation is simply that the experience of MIL is more resilient than originally thought—negative life events, at least in the context of a person's daily life, may not have much impact on perceptions of MIL beyond their shared variance with negative affect. This finding may be specific to the events measured in this study. There is other research suggesting negative events that violate meaning systems can interfere with MIL in ways that have little to do with emotions. For instance, there is a research showing that when we receive negative performance evaluations or are asked to critique our belief system in one domain, we feel compelled to artificially boost our self-worth in other life domains (and we are rarely consciously aware of this defensive reaction) (Baumeister & Jones, 1978). Other work suggests that intense uncertainty can disrupt MIL, pushing people to re-evaluate and/or re-prioritize what they care about (e.g., McGregor, 2007).

### Depression, Daily Events, and Daily Meaning

We also examined individual differences in how people extract meaning from their daily lives. We found that depressive



symptoms increased sensitivity to positive events in daily life. People who reported more symptoms of depression experienced greater increases in daily MIL in response to positive daily social and achievement events compared to those who reported fewer symptoms. In contrast, depressive symptoms did not influence relationships between negative daily social and achievement events and daily MIL.

This finding is inconsistent with some past research demonstrating that depressive symptoms increase sensitivity to both negative and positive events (Nezlek & Gable, 2001; Steger & Kashdan, 2009). It is consistent, however, with research that has found that depressive symptoms moderate reactions to positive, but not negative, events (Nezlek & Allen, 2006; Nezlek & Plesko, 2003). Similar to the present results, in both of these studies, reports of depressive symptoms were positively related to reactivity to positive events and were unrelated to reactivity to negative events.

Previous research suggests that novel, surprising, and hard-to-explain events have more of an impact than repeated, unsurprising events (Wilson, Ndiaye, Hahn, & Gilbert, 2013). In our study, those with more symptoms of depression experienced more negative daily social and achievement events than those with fewer symptoms of depression. In the context of numerous negative events, positive events might be more meaningful. Further, those with more depression symptoms had lower average levels of daily MIL compared to those with fewer depression symptoms. People with an impoverished sense of MIL might be more sensitive to daily events that will boost their daily MIL and thus react more strongly to positive daily experiences than individuals with lower levels of depressive symptoms, who have higher average daily levels of MIL.

## LIMITATIONS AND FUTURE DIRECTIONS

This study had several limitations. We used a sample of college students, which may limit the generalizability of our findings to other populations. The types of events that college students experience on a daily basis may be qualitatively different from those experienced by other age groups. It is also possible that the events that college students find meaningful differ from events that would enhance meaning for other populations.

Future research should explore other events that may be relevant to daily MIL, including future-oriented or growth events, such as applying for a job and making progress toward (rather than achieving) a valued goal. Pleasurable events such as sexual experiences may also increase daily MIL, and revised theories of well-being support examining the interplay between hedonic and eudaimonic components of well-being (Kashdan, Biswar-Diener, & King, 2008). Expanding the range of daily meaning events may enhance our understanding of how to promote MIL. Although we chose to examine social and achievement events given their position as relatively well-established sources of MIL, other types of daily events can

provide sources of daily MIL. It is likely that any positively valenced event can provide a boost in daily MIL, in part by increasing positive affect. Nevertheless, the events that fulfill people's basic needs for meaning (i.e., purpose, value, efficacy, and self-worth) will probably be the most potent sources of daily MIL.

A further next step is to examine the relationship between daily MIL judgments and the global sense that one's life as a whole is meaningful. We did not include a measure of global MIL and were unable to explore the relationship between daily and global MIL. Understanding how and whether meaningful days contribute to global MIL represents an important next step in this line of research. Another key extension is to examine the mechanisms by which positive daily events enhance daily MIL. The extent to which daily events satisfy Baumeister's (1991) four needs for meaning may explain how daily events contribute to MIL judgments. Needs satisfaction should be tested as a potential mediator of the relationship between daily events and daily MIL.

## CONCLUSION

This daily process study showed that both positive and negative daily social and achievement events influence people's sense of MIL and appear to give people continual opportunities to construct a sense of meaning. Positive daily events seem to be uniquely important for perceptions of meaning in daily life. Those with depressive symptoms may benefit more than others from positive daily events. This study captured within-person variations in MIL and suggests the important role that daily events play in fluctuations in people's affective experiences and sense of daily MIL. Increasing the number of positive daily social and achievement experiences a person has on a given day often boosts his or her sense of MIL. Learning to appreciate routine, ordinary life events may be a mechanism by which we can fulfill one of our deepest, most fundamental motivations—to feel as if our lives matter.

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