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To belong is to matter: Sense of belonging enhances meaning in life.

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**Abstract**

In four methodologically diverse studies (N= 644), we found correlational (Study 1), longitudinal (Study 2), and experimental (Studies 3 and 4) evidence that a sense of belonging predicts how meaningful life is perceived to be. In Study 1 (n=126), we found a strong positive correlation between sense of belonging and meaningfulness. In Study 2 (n= 248), we found that initial levels of sense of belonging predicted perceived meaningfulness of life, obtained three weeks later. Furthermore, initial sense of belonging predicted independent evaluations of participants' essays on meaning in life. In Studies 3 (n=105) and 4 (n=165), we primed participants with belongingness, social support, or social value and found that those primed with belongingness (Study 3) or who increased in belongingness (Study 4) reported the highest levels of perceived meaning. In Study 4 belonging mediated the relationship between experimental condition and meaning.

### **To belong is to matter: Sense of belonging enhances meaning in life**

Prominent thinkers have sometimes characterized human life as absurd and meaningless (e.g., Camus, 1942; Kierkegaard, 1849/1941, Sartre, 1939). Yet most people are not paralyzed by an existential void or solipsistic nihilism, and many people even find life enjoyable and meaningful. Efforts to identify what gives meaning to people's lives have been fruitful, as multiple lines of research have provided evidence that social relationships are crucial to finding meaning in life (e.g., Lambert et al., 2010; Stillman et al., 2009; Williams, 1997, 2002). In the present investigation, we sought to build on these lines of research. Our intent was to identify what it is about social relationships that contributes most to making life meaningful. Specifically, we predicted that relationships that provide a sense of belonging would make life most meaningful.

#### **Belonging**

Many theorists have suggested that the human drive for social relationships such that forming and maintaining social bonds reflects an innate tendency that is adaptive and crucial for survival (Ainsworth, 1989; Axelrod & Hamilton, 1981; Barash, 1977; Baumeister & Leary, 1995; Bowlby, 1969; Buss, 1990; Moreland, 1987). In fact, there are physical and mental health repercussions of failing to form interpersonal attachments (for a review see Baumeister & Leary, 1995). They chose the phrase *need to belong* to describe the pervasive human drive to form positive, close attachments. This paper has been widely cited, and the term *need to belong* has since been used as a general term for the desire to form relationships. Of course, it is possible to have positive relationships, thereby satisfying the need to belong in a general sense, yet still not feel that one is fully accepted. In other words, satisfying a general need for positive social relationships—for instance, by participating in a fraternity or sorority—does not guarantee the subjective experience of belonging. In the present investigation, our interest in belonging went beyond whether one has positive relationships and extends to the subjective experience of having

relationships that bring about a secure sense of fitting in. We refer to this as having a sense of belonging.

### **Meaning**

Viktor Frankl (1946/1963; 1969) proposed that humans are driven to find meaning in life, and he termed this motivation *will to meaning*. Klinger (2012) argues that “the human brain cannot sustain purposeless living,” because all the systems of the brain were designed by nature to facilitate meaningful thought and action. In the analyses of both Frankl and Klinger (and those of others, i.e., Baumeister, 1991; Johnson, 1987; Joske, 1974/1982), the drive to find meaning in life is a fundamental aspect of human nature.

Some people's search to find meaning is more fruitful than it is for others, as people vary in the extent to which they believe their life is meaningful. Belief that one's life lacks meaning is associated with a number of negative mental and physical outcomes, whereas belief that one's life is full of meaning is associated with a number of positive variables (see Steger, 2012, for a comprehensive review). The negative consequences of low meaning include psychopathology (Crumbaugh & Maholick, 1964), stress (Mascaro & Rosen, 2006), need for therapy (Battista & Almond, 1973), suicidal ideation (Harlow, Newcomb, & Bentler, 1986), and depression (Debats, van der Lubbe, & Wezeman, 1993; Mascaro & Rosen, 2005). In contrast, high levels of meaning are associated with good physical health and general well-being (Reker, Peacock, & Wong, 1987; Wong & Fry, 1998; Zika & Chamberlain, 1987; 1992).

How does one measure the extent to which a person has found meaning in life? Most often, researchers measure meaning by asking participants for a subjective evaluation of how meaningful their life is. For instance, some researchers have asked participants to indicate their agreement with a statement like “My life has a clear sense of purpose” (Steger, Frazier, Oishi, & Kaler, 2006). There are merits to this self-rating approach (Hicks & King, 2009). Most notably, the researcher gains insight into participants' reactions to very specific statements. The drawback is that the reliability of self-ratings is less than ideal. For instance, a person might blithely assert

that her life is extremely meaningful, without thinking about what constitutes a meaningful life and what gives her life meaning.

**Articulated meaning.** Presumably, people who have found meaning in life would have some insight into why their life is meaningful and what gives it meaning. In contrast, people who have found little or no meaning in life would presumably struggle to articulate why life is meaningful and what gives life meaning. Therefore, one way to go beyond the limitations of self-reported meaning is to ask participants open-ended questions about what makes their lives meaningful. The responses could then be submitted to impartial analysis to quantify one's capacity to articulate meaning. This approach was taken in Study 2.

### **Sociality and Meaning**

Several lines of research have demonstrated that impaired social relationships result in a decreased sense of meaning in life. Researchers have found that people who are socially rejected enter a state of cognitive deconstruction, marked by a decrease in meaningful thought (Twenge, Catanese, & Baumeister, 2003). Williams (1997, 2002) proposed that ostracism thwarts multiple psychological needs, including the need for a meaningful existence. Williams and colleagues have provided consistent evidence that ostracism challenges the ordinary sense that one's life has meaning (e.g., Sommer, Williams, Ciarocco, & Baumeister, 2001; Van Beest & Williams, 2006; Williams, Cheung, & Choi, 2000). Recent research has demonstrated that both discrete exclusion events and ongoing feelings of loneliness result in a global reduction of meaning in life (Stillman et al., 2009). In sum, impaired social relationships result in finding less meaning in life.

Conversely, people commonly associate the presence of social relationships with a sense of meaningfulness. When asked what constitutes a central meaning in life, the most frequent response refers to personal relationships (Ebersole, 1998; Klinger, 1977; Little, 1998), which suggests overlap between sociality and meaning. Research on elderly persons has found that higher levels of social support predict greater meaning in life (Krause, 2007). Experimental studies also suggest that personal relationships are an important source of meaning, as bringing to mind how one acts around "close others" promotes a sense of meaning in life, relative to

thinking about how one acts around “most others” (Schlegel, Hicks, King, & Arndt, 2008). Likewise, thinking specifically about family relationships prompts higher levels of meaning, relative to controls (Lambert et al., 2010; Lambert, Baumeister, Stillman, & Fincham, in press). In short, close relationships are strongly associated with finding meaning in life.

**Need to Belong and meaning.** Humans seem to have a biological need for social relationships (e.g., Baumeister & Leary, 1995). Baumeister (2005) contends that the human thirst for belonging and the capacity to understand large systems of meaning are inextricably linked in the human psyche. Therefore, one would expect the sense of having a meaningful life to depend, at least in part, on a sense of belonging. Some suggest that close relationships offer a symbolic promise of lastingness and continuity that provide individuals with a sense of symbolic immortality (e.g., Lifton, 1979). The symbolic promise of immortality may arise insofar as specific close relationships offer the framework for biological procreation, allowing individuals to live on through their progeny (Mikulincer, Florian, & Hirschberger, 2004). Similarly, others propose that close relationships allow people to feel a part of a larger symbolic entity (e.g., couple or group) that transcends the limitations of their own body and expands the capacities and boundaries of their own self (Aron, Aron, & Norman, 2001). With regard to groups specifically, Hogg suggests that group membership helps reduce feeling of subjective uncertainty by “imposing order on and ascribing meaning to a potentially bewildering social field” (Hogg, 2005, p. 473; see Hogg, 2009). In fact, feelings of belonging in social groups can imbue life with meaning in various ways such as providing stability, helping individuals create a shared social identity, and allowing them to pursue higher order collective goals (Baumeister, 2001; Haslam, Jetten, Postmes, & Haslam, 2008; Tajfel, 1972). In any case, satiating one’s need to belong appears to be important for feeling that life is worthwhile and meaningful. Examining this hypothesized link between belonging and meaning is the objective of this article, with particular attention paid to the subjective experience of belonging.

## Overview of Studies

Although past research has indicated a relationship between social relationships and meaning in life, it is yet unclear what about relationships provides meaning. We hypothesized that sense of belonging is a critical element of social relationships that promotes meaning in life. We conducted four methodologically diverse studies to test the hypothesis that a subjective sense of belonging promotes meaning in life. In Study 1, we used a cross-sectional design to conduct an initial test of our hypothesis. The prediction was simply that having relationships that conferred a sense of belonging would be positively correlated with rating one's life as meaningful. In Study 2, participants were asked to rate their sense of belonging and, three weeks later, were asked to write an essay about meaning in their lives. The essays were independently evaluated, with the expectation that a stronger sense of belonging would be predictive of the capacity to articulate what makes life meaningful. Studies 3 and 4 used experimental designs to test whether a sense of belonging caused an increase in meaning. Participants were primed with either a sense of belonging, feelings of social support, or feelings of social value, with the expectation that participants receiving the belongingness prime would experience a stronger sense of meaning than those in the control conditions. Study 4 also tested whether belongingness mediated the relationship between experimental condition and meaning.

### Study 1

#### Method

#### Participants and Procedure

Participants were 141 undergraduate students (118 female) from the United States participating in the study in exchange for partial course credit. Participants completed the study materials online, at a time of their choosing.

#### Measures

**Sense of belonging.** Given the dearth of measures capturing the subjective experience of belonging, we created a 5-item measure that included items such as "There are places I can go where I feel like I belong," and "I feel like there are many people with whom I belong." The

reliability of the measure was high ( $\alpha = .81$ ). In a separate sample ( $n=117$ ) this measure was highly correlated with measures we expected it to relate to, such as loneliness ( $r = -.54$ ; Russel, 1996) and, based on Sociometer Theory (Leary, 2000), self-esteem ( $r = .64$ ; Rosenberg, 1965).

**Meaning.** To assess meaning, we used the 5-item meaning presence subscale of the Meaning in Life Questionnaire (Steger et al., 2006), which assesses the extent to which one perceives meaning to be present in one's life (e.g., "I understand my life's meaning;"  $\alpha = .94$ ). The other subscale in this measure addresses search for meaning, which was not relevant to our specific hypotheses. Also, the search for meaning subscale has been found to not be strongly related to meaning presence (Steger & Kashdan, 2007; Steger, Oishi, & Kashdan, 2009).

**Demographic variables.** We measured age and sex and did not find any influence of either of these variables on any of the analyses and therefore we did not report the results in the analyses below.

## Results and Discussion

We expected that sense of belonging would be related to higher levels of perceived life meaningfulness. Results confirmed our expectations, as belonging was a robust predictor of meaningfulness,  $\beta = .31, p < .001$ . We sought to build upon this finding using a different way of assessing meaning in life.

### Study 2

The main purpose of Study 2 was to go beyond self-reports of meaning. In the current study, we asked participants to articulate what made life meaningful and subsequently submitted their short essay responses to impartial analysis. Our expectation was that people with a weak sense of belonging would not only self-rate as having relatively low levels of meaning in life, but that independent and impartial observers would rate their short essay responses as evincing low levels of meaning as well.

Finding an alternative measure of meaning provides more than methodological convergence. Self-reported meaning in life is a popular and important method in the study of



meaningfulness, but there are well-known shortcomings to self-report measures. For instance, undergraduate research participants might casually aver “Oh sure, my life has tons of meaning” without having a clear sense of what that meaning is. Hence the present study asked participants to write specifically what meaning their lives have. To be sure, an effective response to such a question may require an articulate thoughtfulness that exceeds the capacity of some respondents, so it may err in the opposite direction from the simple self-report scales. In our view, convergence across both self-report and essay explanations may provide the methodologically strongest means of assessing life’s meaning. A second goal of the present study was to replicate the cross-sectional association observed in Study 1, this time using an alternative measure of meaning.

### **Participants and Procedure**

Participants were 248 undergraduates (213 women) from the United States who participated in exchange for partial course credit. Participants completed a belongingness measure at Time 1, and at Time 2 (three weeks later) they completed measures of meaning.

### **Measures**

**Belonging.** To assess perceived sense of belonging we used the 5-item measure described in Study 1 that included items such as “I feel like there are many people with whom I belong.” Cronbach's alpha was .85.

**Articulated meaning.** At Time 2, participants were asked to write an essay addressing the questions “Why is life meaningful?” and “What makes your life meaningful?” These essays were evaluated by four research assistants (naive to study aims), who independently rated participants’ responses. The research assistants were instructed to estimate the extent to which the essay writer seemed to find his or her life meaningful. Specifically, they were instructed to “rate from 1(not at all)” to “11(extremely)” how meaningful the essay writer thinks his or her life is. Further instructions included asking raters to try to infer how meaningful the essay writers found their own life, rather than imposing raters' own view of a meaningful life on participants. Although few individuals cited belongingness directly as a source of meaning in their life, most

described family relationships and/or friendships with whom they belong, which is consistent with other research (Lambert et al., 2010).

There was agreement among the four raters on articulated meaning (Intra-class Correlation Coefficient, or ICC, =.72), so their responses were totaled to create an articulated meaning score. Additionally, research assistants rated how thoughtful the essays were (again from 1 to 11) due to the possibility that ratings of low meaning could be due to some participants' putting forth minimal thought and effort into writing their essays. We hypothesized that a low sense of belonging would be related to an actual inability to articulate a meaningful purpose in life, so our expectation was that belongingness would predict ratings of meaning above and beyond the apparent thought put into the essays. Ratings of thoughtfulness also demonstrated good reliability, ICC=.85. In short, research assistants read each essay and rated it according to the apparent degree of meaning in the essay writer's life (termed articulated meaning, which was the main dependent variable) and the apparent degree of thought that went into the essay (to be used as a covariate).

**Self-reported meaning.** One would expect articulated meaning scores to correspond to established self-rating meaning scales. To demonstrate the convergent validity of the articulated meaning scores, we used two self-reported meaning scales, also obtained at time 2. Participants completed the 5-item meaning presence subscale of the Meaning in Life Questionnaire that was used in Study 1 ( $\alpha=.91$ ; MLQ; Steger et al., 2006). We also administered the 17-item Kunzendorf No Meaning Scale ( $\alpha=.92$ ; KNMS; Kunzendorf & McGuire, 1994; Kunzendorf, Moran & Gray, 1995-1996). This scale assesses the extent to which life itself is viewed as meaningless (e.g., "Life is a cruel joke" and "It does not matter whether I live or die").

**Self-esteem.** Self-esteem was assessed with the Rosenberg self-esteem scale (1965). This measure requires individuals to report agreement with 10 items that assess self-esteem (e.g., "I feel that I have a number of good qualities"). We used a 7-point Likert response scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Internal consistency was high ( $\alpha=.88$ ).

**Demographic variables.** We measured age and sex and did not find any influence of

either of these variables on any of the analyses and thus we did not report the results in the analyses below.

## **Results and Discussion**

### **Convergent Validity**

Articulated meaning scores corresponded to both self-report measures. As one would expect, higher presence of self-reported meaning correlated with higher articulated meaning scores,  $r=.28, p<.001$ . Self-reported meaninglessness was associated with lower articulated meaning scores,  $r= -.24, p<.001$ . The association between self-reported of meaning and articulated meaning lends credibility to the articulated meaning scores as a measure of meaningfulness. It also supports the use of the Steger and Kunzendorf self-report scales as valid measures of life's meaning, which should dispel some doubts about relying on them as effective tools for assessing how meaningful people's lives are. On the other hand, the correlations, although highly significant, were not large. The substantial amount of nonshared variance attests to the value of using both types of measure when dealing with a complex and elusive phenomenon such as life's meaningfulness.

### **Belonging and Meaning**

Self-reported sense of belonging had the predicted effect on articulated meaning. A stronger self-reported sense of belonging at Time 1 correlated with higher articulated meaning scores at Time 2,  $r= .30, p<.001$ . We also conducted a partial correlation in which ratings of thoughtfulness were partialled out, and sense of belonging still predicted articulated meaning,  $r= .17, p=.003$ . Thus, people with a strong self-reported sense of belonging are better able to articulate meaning in life—to a degree that is apparent to independent observers—relative to those with a low sense of belonging, and most of this effect is not due any apparent lack of thoughtfulness on the part of those low in belonging. Furthermore, self-reported sense of belonging still predicted articulated meaning when self-reported self-esteem was also partialled out,  $r= .14, p=.02$ .

Next, we tested whether self-reported sense of belonging at Time 1 would predict self-reported of meaning at Time 2. Consistent with expectations, a strong initial sense of self-reported belonging predicted high self-reported presence of meaning scores (MLQ,  $r = .41$ ,  $p < .001$ ), and this remained significant even when partialing out self-reported self-esteem  $r = .20$ ,  $p = .004$ . Likewise, a strong initial sense of self-reported belonging was related to lower levels of self-reported meaninglessness (KNMS,  $r = -.32$ ,  $p < .001$ ), which also remained significant after controlling for self-reported self-esteem  $r = -.20$ ,  $p = .005$ .

Last, we tested whether the effects of self-reported sense of belonging on articulated meaning were at least partly independent of self-reported meaning. We conducted a hierarchical linear regression on articulated meaning in which we entered self-reported of meaning presence and self-reported meaninglessness in Step 1, and then entered self-reported sense of belonging in Step 2. Results of Step 1 demonstrated a significant effect for self-reported meaninglessness ( $\beta = -.16$ ,  $p = .01$ ) and self-reported meaning presence ( $\beta = .23$ ,  $p < .001$ ) on articulated meaning. Yet the inclusion of self-reported sense of belonging, entered in Step 2, predicted articulated meaning over and above this,  $\beta = .20$ ,  $p = .004$ . This relationship remained significant when controlling for self-reported self-esteem  $\beta = .19$ ,  $p = .01$ . This indicates both that there is overlap between articulated meaning and self-reported meaning, and also that self-reported sense of belonging predicts articulated meaning in a way that goes beyond self-reported meaning. It also suggests that the essay measure of articulated meaning can add useful information above and beyond the self-report scales. Future research should measure all constructs at both time points to test for the temporal stability of the relationships examined in the current study.

### Study 3

In Study 1, we found a strong correlation between sense of belonging and meaning, with strong sense of belonging corresponding to high levels of meaning. In Study 2, we found that sense of belonging predicted independent evaluations of meaningfulness. Study 2 also found that belonging at Time 1 predicted later levels of meaning at Time 2. Study 3 used an experimental

design to test the hypothesis that feelings of belongingness cause people to perceive their lives as meaningful.

One methodological problem with activating a sense of belonging is that one risks activating a host of other important variables as well. For instance, if a participant primed with a sense of belonging were compared to a participant in a neutral control condition, it would be unclear whether the (expected) difference in meaning was specifically due to sense of belonging or whether the difference was due to the general feeling of having friends. Alternatively, any (expected) differences between participants primed with a sense of belonging and those in a control condition might be due to the positive feelings that stem from thinking about people with whom one has a good relationship, rather than sense of belonging specifically.

To rule out such competing explanations, all participants in the current study were primed with social relationships. That is, to provide a rigorous and conservative test of the hypothesis that belonging increases perceived meaning in life, we primed participants with a sense of belonging, feelings of social support, or a high sense of social value. Hence all three conditions could plausibly increase meaningfulness beyond baseline. Indeed, social support does predict meaningfulness (Krause, 2007) as does self-esteem, which is related to social value (Baumeister, 1991; Steger & Frazier, 2005). Nevertheless, we expected that participants primed with a sense of belonging would report the highest levels of meaning, which would allow the inference that a sense of belonging causes an increase in meaning above and beyond that which can be explained by general feelings associated with having positive relationships.

## **Method**

### **Participants**

Participants were 105 students from the United States undergraduate family science students (49 female) participating in the study in exchange for partial course credit.

### **Procedure**

Materials were completed online. Participants were randomly assigned to one of the following three conditions.

**Sense of belonging condition.** Participants assigned to the belonging condition were given the following instructions, “Close your eyes and think of two people or groups of people with whom you feel that you really belong. Now, write the names of the individuals or groups and the type of relationship you have with them.” They were then asked to describe each individual (or group), why they felt like they belonged, and how it made them feel. Last, they were asked to write a paragraph describing a specific instance when they felt a strong sense of belonging with this person/group.

**Social support condition.** Participants assigned to this condition were instructed to “Close your eyes and think of two people that have recently given you help or support. Now, write the names of these people and the type of relationship you have with them.” They then wrote a description of each individual, the support they received, and how it made them feel. Last, they wrote a paragraph about a specific instance when they received support from this person.

**Social value condition.** We sought to induce feelings of high social value by having the participants recall some compliments that they had recently received. Instructions were as follows: “Close your eyes and think of two people that have recently given you a compliment and how it made you feel. Now, write the names of and the type of relationship you have with these individuals.” Once they had written down the names they were asked to describe the compliment and how it made them feel. They were then instructed to write a paragraph describing another instance when they were given a compliment and how it made them feel.

Following the experimental manipulation, state meaningfulness was assessed using a 2-item measure consisting of the items “How much meaning do you feel in your life at this very moment?” and “At this moment, how much do you think you have a good sense of what makes life meaningful?”. Responses ranged from 1 to 15, with larger numbers indicating greater meaning. The items were highly correlated at .68. We switched to using this more sensitive, state measure so that we could pick up on more fleeting feelings of meaning.

## Results

Results supported the hypothesis that priming thoughts of belongingness would cause an increase in perceptions of meaningfulness. There was a main effect for condition,  $F(2, 102)=3.05, p=.05$ . Planned comparisons revealed higher meaning among those in the belonging condition ( $M=24.18, SD=4.77$ ) than among those in the social support condition ( $M=21.39, SD=5.62$ ),  $F(1, 102)=5.38, p<.05; d=.56$ , or the social value condition ( $M=21.44, SD=5.49$ ),  $F(1, 102)=4.59, p<.05; d=.55$ . Thus, sense of belonging caused an increase in meaning, even relative to other aspects of positive social interactions.

One shortcoming of the current study is that it did not provide evidence that sense of belonging was higher in the sense-of-belonging condition. We conducted a validation study to ensure that our sense-of-belonging manipulation increases sense of belonging.

### **Validation Study**

Participants were 191 undergraduates from the United States who completed the experiment online. We measured the effect of experimental condition (sense of belonging, social support, and social value) on sense of belonging using a two-item questionnaire, e.g., “I currently have a sense of belonging on my mind”,  $\alpha=.74$ . Agreement was rated from 1 (strongly disagree) to 15 (strongly agree). As expected, participants’ sense of belonging varied according to condition,  $F(2, 188)=2.98, p=.05$ . Those in the belonging condition expressed a stronger sense of belonging ( $M=11.80; SD=2.55$ ) than those in social-support condition ( $M=10.68; SD=3.22$ );  $F(1,127)=4.85, p=.03$ , or those in the social-value condition, ( $M=10.69; SD=3.25$ );  $F(1,127)=4.67, p=.03$ . These results indicate that the manipulation used in the current study was effective at increasing a sense of belonging. We also measured positive and negative affect (Watson, Clark, & Tellegen, 1988). However, neither positive affect ( $F<.1$ ) nor negative affect ( $F<.1$ ) varied by condition. Although we conducted this validation study, more data were needed to determine whether manipulating belongingness would simultaneously increase both experienced belongingness and meaning.

## Study 4

The objective of Study 4 was to provide additional experimental evidence that manipulating belongingness would indeed increase subjective perceptions of belongingness and meaningfulness. This time we measured belonging directly following the manipulation and examined the indirect effect of condition on meaning through belonging. We also sought to examine the robustness of our effects by examining the effects of belongingness using an Indian sample. We hypothesized that manipulated belonging would enhance meaning and that state belongingness would mediate the relationship between experimental condition and perceived meaningfulness.

## Method

### Participants

Participants were 166 Indian undergraduate psychology students (65 female) participating in the study in exchange for partial course credit.

### Procedure

Materials were completed with paper and pencil measures. Participants were randomly assigned to one of the following three conditions. All conditions and procedures were identical to those in Study 3.

### Measures

**Belongingness.** Immediately following the experimental manipulation, participants answered two questions regarding their sense of belonging: “Right now I have a sense of belonging on my mind” and “I really feel like I belong with others.” The items correlated at .56.

**State meaningfulness.** State meaningfulness was again assessed using a 2-item measure that included the items “How much meaning do you feel in your life at this very moment?” and “At this moment, how much do you think you have a good sense of what makes life meaningful?”. Responses ranged from 1 to 15, with larger numbers indicating greater meaning. The items were highly correlated at .72.



## Results and Discussion

One-way ANOVA confirmed that belongingness ratings varied among experimental conditions  $F(2, 163)=4.05, p<.05$ . Contrasts between conditions showed that priming thoughts of belongingness caused an increase in perceptions of belongingness ( $M= 5.65$   $SD=1.87$ ) relative to the social value condition ( $M= 4.89$   $SD=1.98$ ),  $F(1, 163)=6.72, p=.01, d=.39$ . Unexpectedly, priming thoughts of social support also caused an increase in perceptions of belongingness ( $M= 5.68$   $SD= 1.47$ ) relative to the social value condition ( $M=4.89$   $SD=1.98$ ),  $F(1, 163)=5.49, p<.05, d=.45$ . There were no significant differences on perception of belongingness between the thoughts of belongingness and thoughts of social support  $F(1, 163)=.08, p=.78, d=.02$ .

Given that among this Indian sample social support increased belongingness at the same rate that the belongingness condition increased belongingness, we did not include this condition in the remaining analyses. Compared to a social value condition ( $M= 23.33$   $SD= 5.78$ ), the participants in the belonging condition reported significantly higher levels of perceived meaning ( $M= 25.69$   $SD= 4.35$ ),  $F(1, 108)=5.87, p<.05, \eta^2_p = .05$ .

To ensure that the increase of meaning was caused by the increased belonging, we ran mediational analyses and predicted that enhanced sense of belonging would mediate the relationship between experimental condition and perceived meaning. Again, given that the social support condition did not differ from the belonging condition, we ran the mediational analyses with the belonging condition and compliment conditions only. We used the bootstrapping method developed by Preacher and Hayes (2008). Mediation has typically been tested using the Sobel (1982) test which assumes that the product of coefficients constituting the indirect effect is normally distributed. However, this distribution tends to be skewed and leptokurtic (Preacher & Hayes, 2008). As a result, resampling or bootstrapping methods are replacing prior methods for testing mediation (Shrout & Bolger, 2002). A confidence interval for the size of the indirect path is generated and if the values between the upper and lower confidence limit do not include zero this indicates a statistically significant mediation effect. The indirect path through belongingness was statistically significant, as indicated by finding that the 95% Confidence Interval (bias

corrected) for the indirect path through this mediator did not include zero (-2.14; -0.10), indicating sense of belonging significantly mediated the proposed relationship. Thus, our hypotheses were confirmed that enhancing a sense of belonging would increase perceived meaning in life relative to a positive control.

### **General Discussion**

Four studies showed that a relatively strong sense of belonging predicted and even caused people to perceive high levels of meaning in their lives. Study 1 was correlational, and results indicated a robust relationship between sense of belonging and self-reported meaning in life ( $\beta=.58$ ). Study 2 showed that initial perceived belongingness predicted self-reported meaning three weeks later, indicating that the relationship between sense of belonging and meaningfulness is not due to fleeting positive or negative feelings. Rather, the effect of sense of belonging on meaningfulness was shown to endure for at least three weeks.

A second objective of Study 2 was to provide evidence of meaningfulness beyond simple self-ratings. Participants' initial sense of belonging predicted how they articulated the meaning of their lives in an essay format (again, three weeks later), as participants reporting a stronger initial sense of belonging wrote essays that independent raters judged as more indicative of having found meaning in life. Thus, belongingness does not simply encourage people to mark higher numbers on scales that ask them whether their lives have meaning. People who feel they belong are able to express in their own words their sense of life's meaning — and they do so better and more effectively than people with less sense of belonging, as judged by independent observers who were unaware of the belongingness scores. Additionally, we think the use of impartial evaluators as a means of measuring meaning in life is a small but important methodological advance. This is supported by the fact that sense of belonging predicted articulated meaning scores in a way that was significantly correlated with self-reported meaning but at a sufficiently low level that there was a substantial amount of nonshared variance.

Studies 3 and 4 used experimental designs to determine whether activating a sense of belonging caused increased meaning in life. Rather than compare participants primed with sense

of belonging to a neutral control condition, we compared them to participants who were primed with other variables related to social relationships (social support and social value). This allowed the inference that the higher meaningfulness scores reported by those in the belongingness condition were specifically due to the high sense of belongingness or that, given the mediational results, social value or social support affect meaningfulness through a sense of belonging. Study 3 demonstrated that a sense of belonging caused people to report higher levels of meaningfulness, over and above the meaning that stems from positive social relationships and interactions generally. However, we did not include any self-reports of belonging, so it was unclear whether it was belonging that was driving the effect on meaning.

Study 4 addressed this issue by measuring belongingness directly after the manipulation. The belonging condition and social support condition both bolstered belongingness. However, as predicted, belongingness mediated the relationship between condition and increased meaningfulness. This final study provides further evidence for a robust relationship between belonging and perceived meaning. Thinking of valued relationships causes people to feel that they belong, and this feeling contributes to causing people to find their lives to be highly meaningful.

Most of the participants in the current work were students at Western universities. However, participants in Study 4 were Indian students. The results of Study 4 revealed that the effect of belonging on meaning is not specific to Westerners, as increased belonging was associated with a more meaning in both samples. This is not to suggest that the American and Indian samples responded identically to our manipulations. In particular, Indian participants demonstrated increased belonging in response to *both* the belonging prompt and the social support prompt. This unique pattern of results likely reflects important cross-cultural differences between North Americans and Indians (e.g., Kapoor, Hughes, Baldwin, & Blue, 2003). For instance, it is possible individuals in collectivist cultures are more likely to receive social support from perceived in-group members compared individuals from individualistic cultures. As such,

thinking about social support might activate thoughts of in-group cohesiveness more for participants in collectivist cultures compared to participants in individualistic cultures.

In a related vein, research suggests that individuals from collectivist cultures are more likely to utilize implicit social support strategies characterized by “the emotional comfort that one can obtain from social networks without disclosing or discussing one’s problems” (Kim, Sherman, & Taylor, 2008; p. 522). This type of social support allows the individual to be reminded of close others without having to worry about possibly relational implications associated with receiving explicit support (e.g., “losing face”). It is, therefore, possibly that the social support prompts in our studies similarly activated a heightened sense of belonging for the Indian participants compared to the North American participants. Clearly, future research is needed to illuminate how cultural differences moderate the extent to which social support bears on both perceptions of belonging and meaning in life.

Several lines of research illustrate that social exclusion decreases meaningfulness in some way (e.g., Stillman et al., 2009; Williams, 1997; 2002; Williams et al., 2000), and emerging research has demonstrated that family relationships promote meaning in life (Lambert et al., 2010). The present work sheds light on these findings by revealing that relationships which provide a sense of belonging are especially likely to promote meaning in life. In other words, past research has shown that having relationships is related to perceiving life as meaningful, whereas the present work found evidence for the kind of relationship that most promotes meaning in life: those that promote a sense of belonging. Future research should examine which type of associations (e.g., romantic partners vs. social groups) provide the greatest sense of belonging. While all types of social relationships likely contribute to the experience of meaningfulness, it is likely feelings of belongingness in large social groups play a particularly strong role in this experience. Group identification has long been implicated in the maintenance and enhancement of psychological health and well-being, and researchers have posited that it can enhance perceptions of meaningfulness specifically (e.g., Haslam, Jetten, Postmes, & Haslam, 2008). As such, future research may want to directly test how (and why) feelings of

belongingness in large social groups enhance meaningfulness. An interesting test, for example, would be to examine how perceptions of prejudice and discrimination influence reports of meaning. While social exclusion may decrease feelings of meaningfulness (Williams, 1997), perceiving that one is ostracized *because* of one's group membership may paradoxically bolster the experience of meaning by making one's group identity salient (cf. Branscombe, Schmidt, & Harvey, 1999).

Having a sense of belonging is to have a relationship with people, or a group of people, that brings about a secure feeling of fitting in. As such, sense of belonging is not the same as simply having social relationships. Nor is it synonymous with having positive, close relationships. Our use of the term *belonging* is similar to that suggested by Brewer (2008), who proposed that *belonging* is appropriate for describing group membership, whereas *bonding* is preferable when discussing close attachments. The current work suggests that belonging, in the sense of fitting in with others, is closely related to finding meaning in life.

Increasing the meaning that one finds in life may be an important way of promoting well-being (Steger & Kashdan, 2009; Steger, Mann, Michels, & Cooper, in press). The current findings may be useful to practitioners of group therapy, as efforts to increase a sense of belonging to the therapy group seem plausible. Yalom (1995) proposed that group cohesiveness (a distinct but related concept to sense of belonging) is the precursor to group self-esteem, hope, and psychological well-being in the therapeutic environment, and recent work supports this claim (Marmarosh, Holtz, Schottenbauer, 2005). Therefore, promoting a sense of belonging could have curative effects. Finally, given Yalom's finding connecting group cohesiveness to self-esteem, it could be that gaining an increased sense of belonging boosts self-esteem and that this is what enhances meaning. This mechanism should be examined by future research.

## **Conclusion**

Although previous research has demonstrated that, in general, social relationships promote the perception that life is meaningful, the present work found that relationships which promote a sense of belonging are especially likely to promote a belief that one's life is

meaningful. The current studies not only demonstrated a robust correlation between these two variables, but also showed that priming belongingness increased meaningfulness, even compared with participants primed with social support and social value. Furthermore, we did not rely solely on self-reported meaningfulness: We found a similar pattern of results when examining whether earlier belongingness would predict later ability to articulate one's why life is meaningful. Using a diverse set of methods, we found converging evidence that feeling a sense of belongingness is a powerful predictor and cause of finding life meaningful.

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