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Feeling Like You Know Who You Are: Perceived True Self-Knowledge and Meaning in Life

Rebecca J. Schlegel[1], Joshua A. Hicks[1], Laura A. King[2], and Jamie Arndt[2]

Abstract

The essence of who a person really is has been labeled the "true self," and an emerging area of research suggests that this self-concept plays an important role in the creation of a fulfilling existence. Three studies investigate the role of the subjective feeling that one possesses knowledge of one's true self in meaning in life judgments. Consistently, the perception of availability of true self-knowledge (operationalized as the metacognitive experience of ease in describing one's true self) predicted meaning in life judgments over and above other potentially related constructs such as mood and self-esteem. Conversely, the subjective availability of knowledge of how one actually behaves (i.e., one's actual self) was unrelated to meaning in life judgments. Implications and directions for future research are discussed.

"Who in the world am I?" Ah, that's the great puzzle!

Lewis Carroll, *Alice in Wonderland*

People need not fall down the rabbit hole to confront the question that Lewis Carroll refers to as the "great puzzle." Figuring out "who in the world am I?" is a quintessential challenge that people face, and for many people, an important key to solving this puzzle is the *true* self. The true self is defined as who a person really is, regardless of his or her outward behavior. Many people believe that this true self is a vitally important part of a person's identity (e.g., Gergen, 1991). Despite the popularity of lay beliefs about the true self, there is little empirical evidence for the psychological foundations and functions of the true self-concept (i.e., a person's avowed true self). Recently, we argued that one function of the true self-concept is to create meaning in people's lives (Schlegel, Hicks, Arndt, & King, 2009). In five studies we found not only a positive relationship between the cognitive accessibility of one's true self-concept and meaning in life but also that experimentally increasing the accessibility of the true self led to heightened perceptions that life is meaningful. The current studies build on this theoretical framework to examine whether the *subjective feeling* of knowing one's true self also predicts meaning in life. Before turning to the current studies, we first discuss the importance of the true self both in general and as a source of meaning specifically.

The True Self

The idea that the true self is an important part of human existence can be traced back to Aristotle (1998, original work circa 350 BCE), who believed that the highest form of excellence was achieved through living in accord with one's true self. This idea is a recurring theme throughout the history of both psychology and philosophy and is featured in the works of such notable thinkers as Kierkegaard, James, and Rogers. Until recently the idea of a true self had mostly faded from the fore of contemporary psychology but continued to pervade popular culture through books, news stories, television shows, and movies. This prevalence suggests that the true self continues to be a fundamental aspect of the con-

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temporary human condition, and empirical research is beginning to support this notion.

People like and value their true self-concepts more than other self-concepts. Harter (2002) found that adolescents liked attributes that they believed described their true self but did not like attributes that they believed described aspects of their self that felt less authentic. Similarly, college students reported liking their true self traits more than their public self traits (despite evidence that the true self traits were less socially desirable than the public self; Schlegel et al., 2009). Simply by being a part of the true self-concept, some traits, regardless of their desirability, become cherished parts of the self-system.

Consistent with this idea, simply reflecting on one's true self-concept can confer psychological benefits. In a study conducted by Andersen and Williams (1985), participants were asked to reflect on positive aspects of their true self (i.e., private thoughts and cognitions) or positive aspects of their actual self (i.e., public behaviors). Thinking about one's private thoughts and cognitions led to increased self-esteem, whereas thinking about one's positive public behaviors did not influence self-esteem. Similarly, a series of studies by Arndt, Schimel, and colleagues (Arndt, Schimel, Greenberg, & Pyszczynski, 2002; Schimel, Arndt, Banko, & Cook, 2004; Schimel, Arndt, Pyszczynski, & Greenberg, 2001) suggests that activating the "intrinsic self," or beliefs about who you really are, leads to less general defensiveness, conformity, and self-handicapping.

Expressing the true self also predicts positive outcomes. Studies of authenticity (defined as the unimpeded functioning of one's true self in daily life) by Kernis, Goldman, and colleagues (Kernis & Goldman, 2004, 2006; Lakey, Kernis, Heppner, & Lance, 2008) find that self-reported authenticity relates to a host of important outcomes, including self-actualization, self-esteem, and psychological distress. Similarly, authentic self-expression within one's social roles predicts positive mood during role-related tasks as well as overall well-being (Bettencourt & Sheldon, 2001; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). A sense of concordance between one's true self and goals (McGregor & Little, 1998; Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001) as well as between one's true self and public self (Harter, 1992; Schlegel et al., 2009) has also been shown to predict well-being. Taken together, these lines of research converge to suggest that the true self is an important contributor to psychological well-being.

The True Self as a Source of Meaning in Life

In addition to these previously observed relationships, we specifically contend that the true self plays a pivotal role in helping people create meaning in their lives (Schlegel et al., 2009). Why might the true self be used to help create meaning? In

Western culture (at least), people use their true self-concept as a guide for a variety of important decisions (e.g., Baumeister, 1991; Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). In this way, the true self-concept exports legitimacy and value to decisions that may otherwise feel arbitrary and, in so doing, enhances the meaningfulness of these life directions. For example, when choosing a career, the choice that is consistent with one's true self-concept may be evaluated as a more meaningful life pursuit. Imagine a person who is considering two alternatives such as artist and scientist; in many ways neither is *inherently* more meaningful than the other. But for a person who believes she/he is intelligent, skeptical, logical, and detail oriented, being a scientist may be seen not only as a more enjoyable pursuit but also as a more meaningful way to live his/her life. Consistent with this argument, empirical evidence suggests that people are more satisfied with and judge their goals (or other behaviors) as more meaningful when they are consistent with their true self-concept (Bellah et al., 1985; Debats, Drost, & Hansen, 1995; Krause, 2007; McGregor & Little, 1998).

A recent series of studies employed a variety of social-cognitive techniques to begin directly exploring the relationship between the true self and the experience of meaning in life (Schlegel et al., 2009). These studies specifically examined the cognitive accessibility of the true self, reasoning that meaning in life would increase with the accessibility of this meaning-central aspect of the self. In accord with this guiding hypothesis, individual differences in true self concept accessibility, measured with reaction times to true-self-relevant words, predicted meaning in life (Schlegel et al., 2009, Studies 1, 2, and 4). Furthermore, manipulating the accessibility of true self traits (e.g., via cognitive priming procedures) also led to higher meaning in life (Schlegel et al., 2009, Studies 3 and 5). These results suggest that like other sources of meaning in life, priming the true self can enhance meaning in life (Hicks & King, 2008; Hicks, Schlegel, & King, 2010; King, Hicks, Krull, & Del Gaiso, 2006).

But an important piece of the puzzle may be obscured by relying on the accessibility of true self characteristics. Although indices (or manipulations of) accessibility tell us about what is active in memory, this activation can be independent of a person's awareness of that content. To illustrate, in our previous work (Schlegel et al., 2009, Study 4) we assessed individual differences in participants' true self concepts using a reaction time task and asked participants to complete an explicit measure of true self-awareness (i.e., the awareness subscale of the Authenticity Inventory; Kernis & Goldman, 2006). The two measures were not correlated ($r = -.06$), suggesting that each measure was tapping into separate aspects of true self knowledge.

In the present studies we thus examine whether the ability to use the true self to create meaning depends on the extent to which the true self is felt to be known. If the true self feels difficult to imagine or describe, it is unlikely to serve as a

consistent source of meaning. Thus, to more clearly discern the importance of the subjective feeling of knowing the true self, the present studies examine how experiential thoughts about one's true self influence meaning in life. Although cognitive accessibility may tap a relatively nonconscious aspect of the true self, the current studies focus on the subjective experience of possessing true self-knowledge. In this way, the current studies more directly inform the critical role of feeling like you know "who you really are" in the experience of meaning in life.

The proposition that subjective feelings of true self-knowledge should enhance meaning follows from a number of historical perspectives that suggest that true self-knowledge is a critical component of healthy human functioning (Erikson, 1963; Horney, 1950; Jung, 1953; Maslow, 1968; May, 1983; Miller, 1979; Rogers, 1959). Similarly, studies have shown that self-reported true self awareness on Kernis and Goldman's Authenticity Inventory is related to self-actualization, vitality, mindfulness, self-esteem, active coping, and decreased defensiveness (Kernis & Goldman, 2006; Lakey et al., 2008). Harter (1992) also found that adolescents who felt that they knew their true self reported higher self-esteem compared to their counterparts.

Of course, this leads to an important question: How should scholars both measure and manipulate the feeling of knowing the true self to examine the role of this subjective experience in meaning in life? Although previous work has relied on traditional self-report measures to capture perceived self-knowledge (e.g., asking people to reflect on how well they know their true self), we did not see this approach as suitable for our purposes. Although such self-report approaches have their merits (see Paulhus & Vazire, 2007, for a review), they may fail to capture the experiential feeling that one has access to one's true self. We thus developed a novel approach that borrows from the literature on social cognition to capture the online metacognitive experience of knowing (or not knowing), in the present case, one's true self. Specifically, we utilize the metacognitive experience of ease or difficulty (Schwarz, 1998; Schwarz & Clore, 1996) as a means of assessing and manipulating perceived access to true self-knowledge. Because people use the metacognitive experience of ease (or difficulty) as a cue to how much they know about that topic (Alter & Oppenheimer, 2009; Schwarz, 2004), we reasoned that experiencing true self description as easy (or difficult) should directly bear on metacognitive perceptions of true self-knowledge.

True self-knowledge conceptualized in this manner, a number of novel hypotheses then become amenable to empirical scrutiny. Specifically, the current studies relied on the idea of metacognitive ease to explore what happens when true self description is experienced as easy or difficult. From the present perspective, if true self-knowledge is experienced as easily accessed, people should report higher meaning in life. And conversely, to the extent that perceived true self-knowledge is threatened when true self-description is difficult, perceptions of life's meaning should decrease. In this way, these studies allow us then to also examine a question that we could not address in our previous work—are there potential downsides to the use of the true self as a meaning source? For example, what happens when a person is uncertain about who he or she really is?

To test these predictions, we utilized both individual differences in (Studies 1 and 2) and manipulated (Study 3) ease or difficulty of true self-description. For each study, we predicted that easy true self-description would enhance perceptions of meaning in life, whereas difficult true self-description would threaten perceptions of meaning in life. For comparison purposes (as well as to help ensure that any observed effects were unique to the true self and not driven by more general perceived self-knowledge), we also assessed perceived actual self-knowledge in all three studies (Bargh, McKenna, & Fitzsimmons, 2002; Schlegel et al., 2009). The actual self is similar to a public self and defined to participants as "who you are around most people, even if this isn't who you really are." We predicted that actual self-knowledge would have no effect on meaning in life.

Overview and Predictions for Study 1

In Study 1, participants were asked to write a detailed essay about their true self, their actual self (self-related control topic), or the campus bookstore (unrelated control topic). We indirectly assessed the relative availability of self-knowledge (or bookstore knowledge) by content analyzing the essays for detail using a technique developed by Norman and Aron (2003). These researchers assessed the cognitive availability of feared and hoped for possible selves by having participants write essays about either self. They argued that the detail of the essay is an indication of the cognitive availability of that self to the individual. Thus, we predicted that the effect of writing topic would be moderated by the detail or elaboration of the essays. Because the participants who write detailed essays should have more available knowledge on the topic, detail should predict meaning in life in the true self condition only. The availability of knowledge of one's actual self or the campus bookstore should not be important indicators to life's meaning; thus, we predicted that detail would not predict meaning in life in those two conditions.

Study 1
Method

Participants. In partial fulfillment of a course requirement, 75 participants (52 females) enrolled in an introductory psychology course at the University of Missouri participated. Ages ranged from 18 to 25 ($M = 18.45$, $SD = 1.21$). Represented ethnicities included 88% European American, 4% African

American, 5% Hispanic American, 1% Asian American, and 2% other.

Materials and procedure: Writing task. Upon arrival to the laboratory, participants were escorted to a private cubicle where they completed all tasks on a computer. Participants were instructed they would complete a variety of tasks related to different projects conducted by the Department of Psychological Sciences. After completing filler measures, participants were asked to write an essay about their true self, their actual self, or the bookstore. They were instructed that "we [are] interested in how college students describe their self [or the university]" and that they were to write about their self (or a building on campus) for 6 minutes.

In the true self condition, participants were given the following directions:

> Your true self is who you believe you really are. Specifically, we'd like you to think about the characteristics, roles or attributes that define who you really are—even if those characteristics are different than how you sometimes act in your daily life.

In the actual self condition, participants were instructed,

> Your actual self is who you are in your daily life. Specifically, we'd like you to think about the characteristics, roles or attributes that define who are in your daily life—even if those characteristics are different than who you really are.

Participants were further encouraged to "really get into the writing task, and provide as much detail as possible about the particular writing topic."

Meaning in life, self-esteem, and mood measures. After the writing task, participants were instructed to complete a "Life Inventory Survey to assesses how [their] thoughts and attitudes regarding various aspects of [their] lives." Participants completed two measures of meaning in life. First, participants completed the five-item Presence subscale of the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006; $M = 4.75$, $SD = 1.25$, $\alpha = .88$; sample item = "I understand my life's meaning"). Second, participants rated four items adapted from the Purpose in Life test (Crumbaugh & Maholick, 1964; $M = 4.99$, $SD = 1.26$, $\alpha = .82$; sample item = "In life, I have very clear goals and aims"). These items have been identified as tapping meaning in life, specifically, and not simply positive affect (McGregor & Little, 1998) and have been used extensively in recent research on meaning in life (King et al., 2006). As expected, the two meaning scales were highly correlated ($r = .76$); therefore, a composite meaning in life variable was created by averaging the scales ($M = 4.89$, $SD = 1.22$). To control for any mood effects on meaning, participants rated six positive mood adjectives (e.g., *happy*, *joy*, *pleased*) and five negative mood adjectives

Table 1. Correlations Among Measures, Study 1

	1	2	3	4	5
1. Positive affect	—	−.46**	.26*	.75**	.71**
2. Negative affect		—	−.08	−.44**	−.42**
3. Detail			—	.20*	.24*
4. Self-esteem				—	.76**
5. Meaning in life					—

Note: $N = 75$.
*$p < .05$. **$p < .01$.

(e.g., *unhappy*, *depressed/blue*, *worried/anxious*) to provide a measure state positive affect (PA) ($M = 4.33$, $SD = 1.18$, $\alpha = 0.89$) and state negative affect (NA) ($M = 3.11$, $SD = 1.06$, $\alpha = .88$; Diener & Emmons, 1984; Diener, Smith, & Fujita, 1995). Finally, to control for the possibility that writing about the true self may simply enhance self-worth and, in turn, influence meaning in life, participants completed the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; $M = 5.34$, $SD = 1.12$, $\alpha = .91$; sample item = "I feel that I have a number of good qualities"). All items for all measures were rated on a scale from 1 (*very slightly or not at all*) to 7 (*extremely*), and all measures were presented in random order.

Content analysis. A coding system developed by Norman and Aron (2003) was used to assess the cognitive availability of the particular self (bookstore). Four trained research assistants, unfamiliar with the hypotheses or purpose of the study, were asked to rate the level of detail of each essay (1 = *not at all detailed*, 7 = *extremely detailed*). Interrater reliability for the four detail scores was adequate ($\alpha = .77$). These scores were then averaged to create a total detail measure ($M = 4.84$, $SD = 1.16$).

Results and Brief Discussion

Preliminary analyses. Zero-order correlations among the variables included in this study are shown in Table 1. Results of an analysis of variance (ANOVA) revealed significant differences among the detail ratings for each condition, $F(2, 72) = 3.93$, $p < .05$. A Tukey post hoc test revealed that the true self essays were rated marginally more detailed ($M = 5.01$, $SD = 1.24$) compared to the actual self essays ($M = 4.34$, $SD = 1.15$; $p < .10$), and the mean detail rating of the actual self condition was significantly lower compared to the control condition ($M = 5.18$, $SD = 0.94$, for the control condition; $p < .05$). No other differences were significant. Tolerance for the detail variable (0.83) suggested that multicollinearity was not an issue in the analyses.

Primary analyses. To examine the potential effects of elaboration and writing topic on meaning in life ratings, a regression equation was conducted. Two dummy variables were

Table 2. Summary of Regression Analysis for Variables Predicting Meaning in Life, Study 1

Predictor	β
Step 1 (R^2 change = .65, $p < .001$)	
Positive affect	.28*
Negative affect	−.06
Self-esteem	.52**
Detail	.14
Dummy 1 (true self vs. bookstore)	.06
Dummy 2 (actual self vs. bookstore)	.06
Detail × Dummy 2	−.11
Step 2 (R^2 change = .03, $p = .025$)	
Detail × Dummy 1	.29*

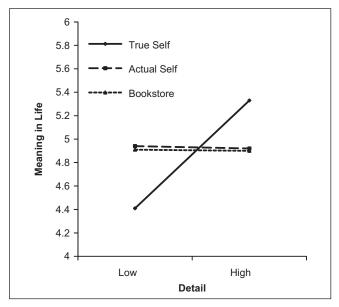Note: $N = 75$, $R^2 = .67$.
*$p < .05$. **$p < .01$.

Figure 1. Meaning in life as a function of writing condition, Study 1

created (Aiken & West, 1991), the first comparing the true self condition to the bookstore control condition (0 = *bookstore*, 1 = *true self*, 0 = *actual self*) and the second comparing the actual self group to the bookstore control condition (0 = *bookstore*, 1 = *actual self*, 0 = *true self*). The product of the centered detail scores and each dummy variable were used as the two-way interaction terms. We also included centered self-esteem, PA, and NA as covariates.

Both PA and self-esteem significantly related to meaning in life. Neither detail nor the condition dummy variables predicted meaning in life. However, the interaction between detail scores and the first dummy variable was significant (see Table 2). The simple slopes for all three conditions are shown in Figure 1. These slopes indicate that greater true self detail was positively associated with meaning in life ($\beta = .41$, $p < .05$), whereas actual self and bookstore detail did not

significantly predict meaning in life ratings ($\beta = −.01$, $p = .96$ for the actual self; $\beta = −.07$, $p = .58$ for the bookstore).

Finally, a parallel analysis directly comparing the true self condition to the actual self condition revealed a similar significant interaction revealing that the simple slopes between the true self condition and actual self condition were significantly different ($\beta = .22$, $p < .05$).

The results of Study 1 are consistent with the hypothesis that perceived true self-knowledge is an important source of meaning. The extent to which the true self was described in a detailed way predicted participants' perceptions of meaning in life. By comparison, level of detail of the actual self (and the campus bookstore) had no effect on meaning in life.

These findings also support the contention that the psychological benefits borne from knowing one's true self are independent of the influence that self-knowledge may have on one's mood or one's self-esteem.[1] Although some caution is warranted in interpreting the null effect of self-esteem (e.g., because we used a trait measure of self-esteem), the present findings are consistent with those obtained by Schimel et al. (2001) and do not support the involvement of (level of) self-esteem in the link between the true self and meaning in life.

Of course, one concern with the interpretation of the present effects pertains to inferences about the ease or difficulty of true self-description. Although content analyzing the essays for detail has been shown to be an effective way to implicitly assess the availability of self-concepts (Norman & Aron, 2003), it is unclear, for example, whether participants who wrote less detailed narratives actually experienced the task as being difficult or, indeed, simply possessed less detailed true selves. Because we predict that the metacognitive experience of ease or difficulty should be driving the effect, not the detail of the essays per se (cf. Schwarz, 1998), in Study 2 we directly assessed the ease or difficulty of recall.

Overview and Predictions for Study 2

In Study 2, participants were asked to generate both a list of words that described their true self and a list of words that described their actual self. After completing each respective writing task, participants were asked how difficult or easy it was to generate the list. We predicted that subjective ease of generating words associated with the true self would predict meaning in life. In addition, because we utilized a within-subjects design, we were able to control for each person's ease or difficulty ratings of perceived actual self-knowledge. This feature of Study 2 also allowed us to compare the contents of the true and actual self-concepts to determine how much the two self-concepts overlapped, an issue of some importance because the degree of overlap may be related to the ease of self-description. If ease of self-description relates to the overlap between the true and actual selves, ease of self-description may serve as a proxy for the authenticity of one's self-aspects (which should have a relationship with

meaning in life; e.g., Kernis & Goldman, 2006). Thus, determining the relationship between true or actual self overlap and self-description ease and controlling for the shared variance between the two variables promise to provide a clearer picture of the unique importance of perceived self-knowledge.

A second goal of Study 2 was to extend the current findings to a nonstudent sample. The vast majority of the studies investigating the importance of the true self have relied on student samples. This may be of some concern given that the importance of the true self may change with age. For example, Harter (1999, 2002; Harter & Monsour, 1992) has suggested that concerns about authenticity are important primarily during adolescence and wane with age as people develop a greater ability to think complexly about their various self-aspects. It is thus important to investigate whether knowing one's true self continues to relate to meaning in life as people age.

Study 2

Method

Participants. In exchange for a chance to win a gift certificate to a local business, 304 staff members (262 women) at the University of Missouri participated. Ages ranged from 27 to 69 ($M = 44.06$, $SD = 9.53$). Represented ethnicities included 95% European American, 1% African American, 1% Hispanic American, and 3% other. A total of 19 participants were missing data on key predictor variables (age, true self ease, or actual self ease) and had to be omitted from the analyses.

Materials and procedure. The measures of interest were embedded in the context of a larger survey study that included a variety of measures that are not discussed in the current report (e.g., intuition). Of interest to the current study, participants were asked to describe both their true and actual selves. Specifically, participants were told that we were interested "in the words people use to describe different parts of themselves." Participants were then asked to generate 6 words to describe both their true and actual selves (12 words total), defined similarly as they were in Study 1.

Immediately after making each list, participants rated two items, one that asked how easy (and one that asked how difficult) it was to think of the words that described that self-aspect. The difficult items were recoded so that higher scores indicated greater ease. The averages of the two ease items served as the measures of true self ($M = 8.10$, $SD = 2.67$, $r = .86$) and actual self knowledge ($M = 7.79$, $SD = 2.73$, $r = .80$). Comparing the true and actual self descriptions, a paired t test showed that the true self was rated as easier to describe than the actual self, though the effect size was quite small, $t(303) = 2.09$, $p = .04$, $d = .11$.

A trained coder then identified the number of overlapping words in each participant's self-concept lists. Word pairs were coded as matches if the words they listed were identical

Table 3. Correlations Among Measures, Study 2

	1	2	3	4	5	6	7	8
1. Age	—	.06	.04	.06	−.10	.04	−.02	.04
2. True self ease		—	.55**	.24**	−.19**	.34**	.29**	.19*
3. Actual self ease			—	.20**	−.16**	.30**	.21**	.33*
4. Positive affect				—	−.60**	.61**	.54**	.16**
5. Negative affect					—	−.55**	−.38**	−.19**
6. Self-esteem						—	.61**	.19**
7. Meaning in life							—	.20**
8. TS/AS overlap								—

Note: $N = 282$. TS/AS = true self–actual self.
*$p < .05$. **$p < .01$.

(e.g., *helpful* and *helpful*) or nearly identical (e.g., *supportive* and *somewhat supportive*) or if they were identified as synonyms in an online thesaurus (e.g., *thoughtful* and *considerate*). This revealed that the amount of overlap between people's true and actual selves differed considerably; participants listed an average of 2.33 (out of 6 possible) overlapping words ($SD = 1.90$, range = 0–6). As an example of a participant with completely separate self-concepts, one participant described her true self as honest, confident, quick thinker, creative, social butterfly, and leader but described her actual self as wife, mother, stressed, overworked, overweight, and challenged. By comparison, a participant with completely overlapping self-concepts described both his true and actual selves as pleasant, kind, easygoing, analytical, quiet, and perfectionist.

Participants also completed the Presence subscale of the MLQ ($M = 7.81$, $SD = 2.09$, $\alpha = .91$) and the same measures of state PA ($M = 7.71$, $SD = 1.94$, $\alpha = .88$), state NA ($M = 2.81$, $SD = 1.93$, $\alpha = .83$), and self-esteem ($M = 7.43$, $SD = 1.43$, $\alpha = .91$). All of the measures were rated on a 9-point scale.

Results and Brief Discussion

Data screening revealed three multivariate outliers with residuals that were more than 3 standard deviations away from the mean. These cases were removed from subsequent analyses, leaving a final sample of 282. Bivariate correlations among all study variables are presented in Table 3. Notably, the overlap variable was positively correlated with both true and actual self ease as well as meaning in life.

A hierarchical regression was computed to assess the potential contribution of true self ease to meaning in life that included PA, NA, self-esteem, age, true self–actual self overlap, and actual self ease as covariates in the first step and true self ease in the second step. The results are reported in Table 4. Given the relatively high degree of correlation

Table 4. Summary of Regression Analysis for Variables Predicting Meaning in Life, Study 2

Predictor	β
Step 1, R^2 change = .42, $p < .001$	
Positive affect	.29**
Negative affect	.01
Self-esteem	.42**
Age	−.06
Actual self ease	.01
TS/AS overlap	.07
Step 2, R^2 change = .01, $p < .05$	
True self ease	.11*

Note: $N = 282$. TS/AS = true self–actual self.
*$p < .05$. **$p < .01$.

between true self ease and a number of the covariates (including the overlap variable), it is notable that the tolerance value for true self ease remained high (.65, which suggests that multicollinearity was not an issue). As predicted, true self ease was a significant predictor of meaning in life over and above the effects of the covariates. This suggests a positive relationship between true self ease and meaning, such that the easier it was to generate words that described one's true self, the greater one's judgments of meaning in life.

Finally, exploratory analyses were conducted to examine whether age might moderate the effects of true self ease. Because most studies concerned with the importance of the true self have relied on student samples, it was unclear whether the true self might become more or less important in experience of meaning in life with age. These analyses revealed that the effect of true self ease did not interact with age ($p > .30$), providing evidence that perceptions of the true self contribute to well-being throughout adulthood.

Study 2 provides converging evidence for the role of perceived true self knowledge in the creation of meaning as the experience of ease or difficulty of true self-description predicted meaning in life judgments. Importantly, this effect was observed after controlling for self-esteem, actual self ease, and true self–actual self overlap. Although true self–actual self overlap was positively related to both true and actual self ease at the bivariate level, it was not a significant predictor of meaning in life in the primary analyses. Furthermore, the regression analyses suggested that the relationship between true self ease and meaning was significant over and above the influence of true self–actual self overlap. Thus, although we suspect that the discrepancy between the true and actual self has some conceptual importance (see also Schlegel et al., 2009), it does not explain the influence of metacognitive ease of thinking about one's true self on the perception of meaning in life.

Despite the convergence of results across Studies 1 and 2, interpretative ambiguities remain. Specifically, these correlational studies preclude causal inferences. It may be the

individuals with high levels of meaning in life experience more readily accessible true selves. As such, the primary purpose of Study 3 was to examine the potential causal effect of true self ease or difficulty on meaning in life with a direct manipulation of the metacognitive ease or difficulty of true self-description.

Overview and Predictions for Study 3

In Study 3, participants listed words that they believed best described various topics. For the final topic, participants listed words that described either their true or their actual selves. To manipulate the difficulty of the task, we adapted a method used by Schwarz et al. (1991). Participants in Schwarz's study were instructed to list either 6 or 12 instances in which they had been assertive and then were asked to rate their own assertiveness. The results showed that participants who listed 6 examples of being assertive rated themselves as more assertive than their counterparts who listed 12 examples. That is, even though participants in the 12 instances condition actually generated more examples of being assertive, the increased difficulty of the task (compared to generating 6 examples) led them to judge themselves as less assertive.

Adapting this basic procedure, we instructed participants to list either 5 (easy condition) or 18 (difficult condition) descriptors of their true or actual selves. This resulted in a 2 (self: true vs. actual) × 2 (ease of recall: easy vs. difficult) factorial design. After the task, participants completed a manipulation check measure of ease and measures of mood and meaning in life. We predicted that the topic of description would moderate the effects of the ease manipulation on meaning in life, such that ease would matter only for participants assigned to describe their true selves.

Study 3

Method

Participants. In partial fulfillment of a course requirement, 146 (85 females) enrolled in an introductory psychology course at the University of Missouri participated. Ages ranged from 18 to 25 ($M = 18.55$, $SD = 0.99$). Represented ethnicities included 90% European American, 6% African American, 2% Hispanic American, and 2% other. Two participants who expressed suspicion about the study's purpose and one participant who stated he had difficulty understanding the materials were dropped from all analyses, resulting in a final sample of 143 participants (ns = 32, 38, 37, and 36 for the true–easy, true–difficult, actual–easy and actual–difficult cells, respectively).

Materials and procedure. Upon arrival, participants were individually escorted to a private computer. Participants were instructed that they would complete two unrelated tasks. Participants first completed a "College Student Descriptor

Study." Participants were instructed that various random topics would appear on the screen and their job would be to write down words that they believed best described each topic. For each topic, they were given information related to the average number of descriptors college students have been able to write down in previous research (e.g., "5") and that they should "Take your time and please try to list [5] descriptors that best describe the [topic]." All participants first responded to the same two prompts. The first asked participants to list descriptors for Columbia, Missouri (they were told the average number of responses was 8 words), and the second asked participants to list items that described breakfast (average number of 10 words). For the third topic, half of the participants were asked to write down words that best described their true selves, and the other half of participants were asked to write down words that best described their actual self.

To manipulate the ease or difficulty in this study, half of the participants in each condition were asked to write down 5 self-descriptors and the other half were asked to write down 18 self-descriptors (adapted from Schwarz et al., 1991). After each topic, participants rated 1 item that assessed how easy it was to think of words that described the particular topic on a 9-point scale. Participants rated the self description ($M = 6.23$, $SD = 2.12$) task as significantly easier than the other two tasks ($M = 4.98$, $SD = 1.55$), $t(142) = 6.13$, $p < .01$.

After the descriptor task, participants were instructed to complete a "Life Attitudes Survey." For this surveys, participants again completed the Presence subscale of the MLQ ($M = 4.87$, $SD = 1.11$, $\alpha = .86$), a measure of state PA ($M = 4.44$, $SD = 1.02$, $\alpha = .87$), and a measure of state NA ($M = 3.14$, $SD = 1.15$, $\alpha = .88$), all of which were on 7-point scales. Based on the consistent null findings of our previous studies and concern for space limitations, the self-esteem measure was not included in Study 3.

Results and Brief Discussion

Preliminary analyses. To assess the effectiveness of the manipulation, a 2 (topic: actual self vs. true self) × 2 (difficulty: easy vs. difficult) ANOVA was performed on the self-reported ease ratings. Results revealed a main effect of the ease or difficulty manipulation, $F(1, 139) = 23.57$, $p < .001$, partial $\eta^2 = .14$. As expected, participants who listed 5 descriptors rated the task as easier than participants who listed 18 descriptors ($Ms = 7.05$, 5.45; $SDs = 1.81$, 2.14, respectively; $d = .81$). Neither the main effect of the type of self nor the interaction between type of self and ease had a significant effect of ease ratings ($ps > .10$). Similar 2 × 2 ANOVAs were performed on positive and negative affect to ensure that the manipulation did not inadvertently influence mood. No significant effects were observed (all $ps > .15$).

Meaning in life as a function of topic and difficulty. A 2 (self: true vs. actual) × 2 (ease: easy vs. difficult) analysis of covariance (ANCOVA), controlling for PA and NA, was computed

Table 5. ANCOVA Results Predicting Meaning in Life, Study 3

Source	df	F	η^2
Positive affect	1	21.51**	.13
Negative affect	1	0.00	.00
Ease	1	1.67	.01
Self	1	0.15	.00
Ease × Self	1	4.34*	.03
Total	134		

Note: For self condition, 0 = actual self, 1 = true self.
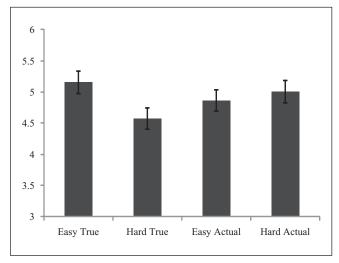*$p < .05$. **$p < .01$.

Figure 2. Estimated marginal means as a function of condition, Study 3

to examine whether the groups differed on meaning in life. As shown in Table 5, neither of the main effects were significant; however, the predicted interaction between topic and ease was significant.[2] As shown in Figure 2, ease of generating self descriptors was an important predictor of meaning in life for participants in the true self conditions but not participants in the actual self conditions. Following the recommendations of Rosenthal, Rosnow, and Rubin (2000), planned contrast analyses of the estimated marginal means were performed to compare the easy and difficult conditions within both types of self-concept. Within the true self conditions, participants in the easy condition reported higher meaning in life ($M = 5.15$) than participants in the difficult condition ($M = 4.57$), $F(1, 134) = 5.61$, $p < .05$, $d = .58$. Conversely, within the actual self conditions, meaning in life did not differ between the easy ($M = 4.86$) and the difficult conditions ($M = 5.00$), $F(1, 134) = 0.33$, $p = .56$, $d = .12$.

The results of Study 3 provide converging experimental evidence that perceived true self-knowledge influences meaning judgments. Notably, Study 3 suggests that simply making people *question* their degree of true self-knowledge (i.e., by making true self description difficult) may be enough to

threaten meaning. It is notable that individuals in the true self difficult condition reported lower meaning in life than those in the actual self conditions, $F(1, 134) = 3.04$, $p = .08$. This comparison suggests that perceived true self knowledge is a relatively fragile commodity. Perhaps even individuals who are relatively confident in their true self knowledge can be led to question the accuracy of that knowledge at times. Indeed, this may be especially likely given the lack of social consensus from which to verify the accuracy of their true self knowledge (Berger & Luckmann, 1966; Goffman, 1959)

General Discussion

Across three studies, true self ease or difficulty consistently predicted meaning in life over and above mood, self-esteem, and actual self ease or difficulty. This provides converging evidence for the importance of perceived true self knowledge in the meaning-making process. Each study used a different methodology to address this issue—this included a combination of self-reported ease (Studies 2 and 3) and more indirect measures of ease (Study 1), correlational (Studies 1 and 2) and experimental designs (Study 3), and between- (Studies 1 and 3) and within-subjects designs (Study 2). In addition, Study 2 utilized a more heterogeneous sample in terms of age than almost all of the previous work on the true self. It is notable how consistent the pattern of results was across these different types of studies, each of which contributes to the conclusion that the true self in general (and true self knowledge in particular) is important to the meaning-making process.

For our purposes, the metacognitive experience of ease or difficulty was used as a proxy for self-perceived levels of self-knowledge. Although this unique methodological approach may help avoid some of the problems associated with traditional self-report measures (e.g., desirability biases), it is important to note that the current investigation is still subjective in nature and not concerned with whether or not a person's true self beliefs are *actually* accurate. Indeed, a growing area of research on self-accuracy suggests that many of our participants may have been inaccurate in their self-assessments (Dunning, 2005; Gosling, John, Craik, & Robins, 1998; Sedikides & Strube, 1997; Taylor, Brown, Colvin, Block, & Funder, 2007). Although self-accuracy is certainly important for well-being (e.g., Brunstein, Schultheiss, & Grassmann, 1998), we believe self-accuracy and perceived self-knowledge are orthogonal and that each can exert a unique influence on well-being. Indeed, for our purposes, it is possible that a person with a well-defined but inaccurate true self-concept could have fared better than an unclearly defined but accurate true self-concept. Of course, more definitive insight into this possibility awaits further research.

Although previous research has focused on the benefits of thinking about one's true self (e.g., Andersen & Williams, 1985; Schimel et al., 2001), the lack of main effects for self type in Studies 1 and 3 suggests that thinking about one's true self may not always be advantageous. Indeed, when thinking about one's true self is difficult, it might actually lead to existential discomfort. Although the present studies lacked the neutral ease or difficulty condition that would allow for clear inferences on this point, it is an interesting possibility to consider. Thinking about one's true self may be more generally beneficial for one's self-esteem (Andersen & Williams, 1985) or in decreasing defensiveness (Schimel et al., 2001), but it may not always be beneficial for more existential outcomes. Perhaps these other outcomes are more affected by the general warmth of "me-ness" (James, 1890) that true self reflection can create. Future research should further examine the generalizability and boundaries for these types of effects. Understanding when true self reflection is beneficial for everybody and when it is not would help us better understand how and why it is that the true self is such an important part of our shared understanding of the self (at least in this culture). It may also be important to consider potential differences between *reflections* on the true self and *expressions* of the true self, particularly when those expressions are accompanied by expectations of how others will react. In Schimel et al. (2001), for example, participants were actually more defensive if they expressed their intrinsic core sense of who they were but did not receive positive feedback from others.

Directions for Future Research

Future research should also examine how reminders of the true self are processed in daily life. The task of true self-description may be thought of as an explicit reminder (or prime) of the idea of a true self more generally. Considering that explicit reminders of the true self generally abound in our culture (e.g., in movies, books, etc.), the chance of encountering explicit true self primes in daily life may be high. It would be interesting to see if more general primes about the idea of the true self could produce similar effects based on people's preexisting levels of perceived true self-knowledge. Even these more general explicit reminders of the true self (i.e., reminders of the idea of a true self even independent of one's true self) may be beneficial to a person's sense of meaning if one has a high level of perceived true self-knowledge and may be existentially threatening for individuals with a low level of perceived true self-knowledge. It would also be interesting to examine people who believe they are actively trying to "find" their true selves: Is this a persistent existentially threatening state to be in, and can the search for one's self be reinterpreted as an opportunity for growth?

Another important avenue for future research is examining the role of culture in the true self and meaning relationship. This is particularly pertinent considering the important role cultural beliefs about the self play in the formation and ultimate organization of the self (Suh, 2000). Research generally suggests that Western cultures tend to think of the self as something that exists within the person, whereas Eastern

cultures tend to think of the self as existing entirely within relationships and situations (e.g., Markus & Kitayama, 1991). Certainly the true self that has been discussed in the current article seems more closely aligned with the Western view of the self, suggesting that the idea of an intraindividual true self may have little value outside Western cultures. However, there is at least some evidence that the true self is important in other cultures. For example, research has shown that the concept of authenticity is important across cultures (e.g., Neff & Suizzo, 2006). Certainly future research is needed to better examine the role culture might play in these observed relationships.

Limitations

The current studies are limited in several ways. Participants in all three studies were mostly White and female (though Study 3 had a significant proportion of male participants). Certainly future research should aim to obtain more heterogeneous samples, particularly considering the potentially critical role of culture in these processes. In addition, it would have been useful to include other self-concepts in addition to the actual self for comparison purposes. Although we believe that the actual self serves as an effective control to the true self, testing other self-concepts (e.g., relational, ideal, or possible selves) would help provide a stricter test of the uniqueness of the relationship between the true self and meaning.

Conclusion

The current studies provide converging evidence to the growing literature implicating the true self's association with psychological health and well-being. Although we take no stance on whether there really is such a thing as a true self, it is clear that people value the traits and roles that most accurately represent their true self concept. Furthermore, these studies go beyond previous research to suggest the perceived availability of one's true self concept, and not just its implicit accessibility, particularly contributes to one's sense of meaningfulness. The subjective feeling of true self-knowledge, regardless of whether this self actually exists, serves an important meaning-making function. Unfortunately, this may also mean that uncertainty in understanding one's true self may lead to doubt about the purpose of one's life.

Notes

1. Further supporting the independence of the effect of perceived self-knowledge, neither self-esteem nor positive affect interacted with condition to predict meaning in life (ps < .56).
2. In Study 2, we reran the analysis without the inclusion of self-esteem as a covariate. This result revealed that the effect size of true self ease increased from .01 to .02 (R^2 change). This suggests that the shared variance between true self ease and self-esteem (which is not accounted for in Study 3) may have inflated the effect size of the true self ease manipulation. Although we believe this possibility would not change the statistical significance of the current finding, some caution is warranted in interpreting the effect sizes reported in Study 3.

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