Existential Meaning's Role in the Enhancement of Hope and Prevention of Depressive Symptoms

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ABSTRACT The authors confirmed that existential meaning has a unique relationship with and can prospectively predict levels of hope and depressive symptoms within a population of college students. Baseline measures of explicit meaning (i.e., an individual's self-reported experience of a sense of coherence and purpose in life) and implicit meaning (i.e., an individual's self-reported embodiment of the factors that are normatively viewed as comprising a meaningful life) explained significant amounts of variance in hope and depressive symptoms 2 months later beyond the variance explained by baseline levels of hope/depression, neuroticism, conscientiousness, agreeableness, openness to experience, extraversion, and social desirability. The authors discuss implications of these findings for the field of mental health treatment and suggest ways of influencing individuals' experience of existential meaning.

As the incidence of depression and suicide continue to rise (Barlow & Durand, 2002, p. 195), it becomes ever more important to investigate factors affecting the development of depressive symptoms. One variable that appears primary in the etiology of depression is hope (Kwon, 2000; Whisman & Kwon, 1993), with hopelessness mediating a tremendous amount of the variance in successful suicide (Beck, Brown, Berchick, Stewart, & Steer, 1990). A key variable in its own right, regardless of its links to depression and suicide, hope

has been found to exert causal influence on academic achievement, athletic performance, engagement in health-related behaviors, pain tolerance, and coping with ill health (Snyder, 2002). A phenomenon that may parallel increased rates of depression and hopelessness is the loss of existential meaning, or existential neurosis, which could be considered the disorder of our age: Consider the demise of the idealism typically provided by religion, metaphysical philosophy, and other such activities that engage humans in vertical or transcendent cogitation (Fabry, 1998), dying out of the old-world activities of planting and harvesting that gave people concrete purpose as well as a deeper communion with nature (Yalom, 1980), and the concurrent rise of materialism, reductionism, and nihilism. Though the concept of existential meaning appears to have potential in terms of its ability to explain and perhaps influence unique aspects of depression and hope, there is a dearth of psychometrically sound research into its relationship (particularly over time) with these variables.

Research implies that the analysis of individuals' experiences of meaning in life, or existential meaning (as opposed to semantic meaning), can tell us something valuable about mental health and that the variable of existential meaning is therefore worthy of the attention of psychologists. To give some examples, Yalom (1980) reported that out of 40 consecutive patients at an outpatient clinic, 12 to 22 percent had problems revolving around existential meaning, depending on whether the conceptualization was that of a therapist and three independent raters or that of the patient, respectively. Debats, Drost, and Hansen (1995) found that undergraduates who could remember times when they had experienced their lives as meaningless were more likely to have had psychological counseling in the past and were currently less satisfied with their lives than those who could not recall times when had they felt their lives had no meaning. In constructing the Reasons for Depression Questionnaire, an instrument that allows patients to indicate their own view of why they are depressed, Addis, Truax, and Jacobson (1995) found that *existential concerns* is one of eight types of reasons people tend to give for becoming depressed. Later, Addis and Jacobson (1996) found that patients' perceived reasons for their depression are important, as those clients who indicated existential sources for their depression had better responses to cognitive therapy than to behavioral activation therapy.

In contrast to the scarcity of empirical research on existential meaning, existential theory is fairly well developed. Viktor Frankl (1966, 1988, 1992) proposed that overcoming psychologically painful situations requires the ability to shift from a ''What do I want from Life'' attitude towards a ''What does Life want from me?'' attitude, to transcend desires for pleasure or power and, instead, fulfill the uniquely human will to meaning, to find the *why* in situations that are ostensibly absurd. According to Frankl, although there may be times when a person's behavior is not entirely under her own control, a person can always control her attitude such that she might find meaning even through unavoidable suffering. Frankl suggested that the ability to maintain a meaning-saturated attitude gives individuals a special resiliency that promotes the sustenance of hope. Conversely, when individuals do not consistently affirm their freedom and responsibility to control their attitudes, when they do not acknowledge their inherent motivation to find meaning in life— letting this instead take a back seat to the pursuit of pleasure or power—or when they are simply unable to find a purpose that they feel uniquely meant to pursue, then they presumably experience a condition called an *existential vacuum*. And when someone with such a vacuum is confronted with significant life stress, it is proposed that an *existential neurosis* can be triggered. Maddi (1967) has described existential neurosis as consisting of cognitive symptoms such as devaluing one's personal pursuits or goals, affective symptoms such as dull or depressive affect, and behavioral symptoms such as disengagement from activity. Characterized as it is by anhedonia, depressive affect, and behavioral disengagement, the existential neurosis could be viewed as a form, or subtype, of depression.

Despite the rhetorical force with which Frankl described the construct, as well as the popularity that his writings enjoy outside the mainstream of psychology, psychologists have paid scant attention to the measurement of existential meaning (Debats, 1999; Harris & Standard, 2001). The earliest and most popular quantitative assessment device aimed at assessing meaning, the Purpose in Life test (PIL; Crumbaugh, 1968; Crumbaugh & Maholick, 1964), suffered from several psychometric inadequacies including complicated and inconsistent factor structure (Chamberlain & Zika, 1988a; Dufton & Pearlman, 1986, as cited in Pargament, 1999; Reker, 2000; Reker & Cousins, 1979), a lack of discriminant validity (Braun & Domino,

1978; Dyck, 1987; Yalom, 1980), and its being confounded with the variables it was often used to predict (Dyck, 1987; Yalom, 1980). For instance, although the conceptualization of meaning as having a sense of coherence and purpose in life (Yalom, 1980) implies that meaning is primarily a cognitive construct, the PIL contains much affective content that directly assesses individuals' experiences of depression and even suicidal ideation. So when studies are conducted examining the relationship between the PIL and scales measuring affectively saturated mental health constructs, significant results are guaranteed and therefore confounded.

Fortunately, two gauges of different aspects of existential meaning have been constructed that are not confounded with affective content. These are the framework subscale from the revised Life Regard Index (LRI-R-framework; Debats, 1998), which assesses the extent to which an individual is mindful of a framework or philosophy for living her life, and the Personal Meaning Profile (PMP; Wong, 1998a), which assesses the extent to which an individual engages in activities and values attitudes that people typically report as comprising an ideally meaningful life. The LRI-R-framework measures an explicit sense of meaning, whereas the PMP measures an implicit sense of meaning. The construct of explicit meaning is straightforward, i.e., having a life saturated with a conscious sense of coherence and purpose. Regarding the notion of implicit meaning, according to Wong (1998a) and the PMP, people tend to report seven factors that comprise a meaningful life: achievement (i.e., pursuit and attainment of significant life goals), relationship (i.e., general social adeptness), religion (i.e., having affirmative beliefs about and a relationship with the divine), self-transcendence (i.e., engagement in selfless pursuits that have beneficial effects on those besides the individual), self-acceptance (i.e., a humble acceptance of one's limitations), intimacy (i.e., having emotionally close and loving relationships), and fair treatment (i.e., perceiving a degree of justice in one's life). Thus, the PMP assesses a person's self-reported embodiment of the characteristics that someone looking from the outside would say gives her a meaningful life. The LRI-R-framework and PMP are promising instruments for investigating existential meaning because they aim at specific subconstructs of a more general construct, and such specificity decreases the likelihood that they will include such a broad array of content as to compromise their discriminant validity.

The LRI-R-framework and PMP appear to be useful instruments for testing the relationships theorized to hold between meaning, hope, and depression. A longitudinal study examining these relationships is badly needed. For instance, although an adequate amount of data supports the LRI-R-framework's reliability and validity (Chamberlain & Zika, 1988a; Debats, 1990, 1999; Debats, Drost, & Hansen, 1995; Debats, Van Der Lubbe, & Wezeman, 1993; Harris & Standard, 2001; Van Ranst & Marcoen, 1997), as well as its cross-sectional clinical utility (Chamberlain & Zika, 1988b; Debats, 1990; Debats et al., 1993; Harris & Standard, 2001; Scannell, Allen, & Burton, 2002; Zika & Chamberlain, 1992), its ability to predict mental health variables over time has been explored in only one published study (Debats, 1996). There are no longitudinal data for the PMP, although a study was recently conducted (Mascaro, Rosen, & Morey, 2004) that supported its validity and incremental clinical utility relative to other personality measures.

Considering early existential theory, which posited meaning as a key variable that could promote a robust sense of hope, the lack of which could lead to a depression-like existential neurosis, we hypothesized that, within a population of undergraduates, most of whom would be experiencing the stress of their first semester in college, the PMP and LRI-R-framework would not only be able to prospectively predict variance in hope and symptoms of depression but would be able to do so in addition to the variance attributable to social desirability and the Big Five personality factors. That is, we predicted that students' levels of explicit and implicit meaning early in the semester would predict significant amounts of variance in their levels of hope and depressive symptoms 2 months later (near the semester's end) beyond the amount of variance attributable to baseline depression and hope levels, social desirability, neuroticism, conscientiousness, agreeableness, openness to experience, and extraversion. (The 2-month period of time was selected because it covered the major portion of most of the students' first semester in college and testing them over a longer amount of time would have interfered with their studying for their final exams.) Of note is our inclusion of both social desirability and broad-ranging personality variables as controls. Inclusion of such controls decreases the likelihood that significant results are due merely to confounds of existential meaning with the tendency to fake good or to be self-deceptive, or with levels of conscientiousness, extraversion, neuroticism, agreeableness, or

openness. In addition to showing whether or not meaning is linked to hope and depression, it is important to indicate to what extent it gives us information about them that cannot be gleaned from other personality variables. Should the results turn out as hypothesized, then solid empirical support based on quality measurement devices and longitudinal data would at last exist for the existential hypothesis that meaning influences unique aspects of the experience of hope and symptoms of depression.

METHODS

Participants

Three hundred twenty-nine undergraduates enrolled in introductory psychology courses at a large, state university in the southwestern United States completed the listed self-report measures for course credit. Of these 329 individuals, 191 completed the same measures 2 months later. Though attrition was clearly high, individuals who dropped out of the study did not differ significantly from those who completed both time points in terms of any of the variables assessed: No *t* values reflecting mean differences between completers and dropouts were significant at the $p = .05$ level, and *t* values ranged from 0.18 to 1.68. All analyses discussed in subsequent portions of the current article involve the sample of 191 completers. For these 191 individuals, the mean age was 18.8 years, with a standard deviation of 0.93. One-hundred sixty-two (84.8%) of the participants described themselves as Caucasian, 13 (6.8%) as Hispanic, 7 (3.7%) as Asian, 3 (1.6%) as African American, 5 (2.6%) as of other, unidentified ethnicity, and 1 (0.5%) as Native American. One hundred forty-two (74%) of the participants were female.

Materials

Explicit meaning.   An explicit sense of meaning is defined as having a philosophy or framework that provides a sense of coherence and purpose in life. Of the two subconstructs of meaning being explored in the present study, explicit meaning has the most underlying amount of empirical research. The Life Regard Index (LRI) has been endorsed as a good measure of this form of meaning (Debats, 1998; Reker, 2000), and we believe the framework subscale of the LRI to be the part of the LRI that is least confounded by affective content. The LRI does contain a "fulfillment" subscale that is intended to assess the degree to which one believes one is fulfilling or living in accord with one's life framework. Although this form

of fulfillment is an important component of existential meaning, many of the fulfillment subscale's items (e.g., *Living is deeply fulfilling, I really feel good about my life, Other people seem to feel better about their lives than I do, I have real passion in my life, I get so excited by what I'm doing that I find new stores of energy I didn't know that I had, Nothing very outstanding ever seems to happen to me, I feel that I am living fully*) contain so much affective content that the subscale is confounded with affect-laden mental health variables, such as depression. That is, the scale suffers from problems with discriminant and content validity, and while it does measure some aspects of living in accord with one's life framework, it largely measures positive affect and lack of depression. It is therefore inappropriate for the current study. For further discussion of the issue of confounding, see Mascaro et al. (2004). In the current study, we used Debats's (1998) version of the LRI-framework, which is slightly altered from the original LRI-framework in that its items are in a different order, one word was deleted from three items, and items are rated on a 3-point rather than a 5-point scale. It includes such positively worded items as *I feel like I have found a really significant meaning for leading my life* and *I have a philosophy of life that really gives my living significance,* and such negatively worded items as *I really don't have much of a purpose for living, even for myself* and *I really don't believe in anything about my life very deeply*. The measure's coefficient alpha in the current study was .81.

Implicit meaning.   The development of the PMP was itself the first exploration of the construct of implicit meaning. To make the PMP, Wong (1998a) asked individuals what they thought comprised the ideally meaningful life. He recorded the most popular replies and then transformed those replies into Likert-format questions. He administered these questions to individuals, then subjected the responses to factor analysis and observed the relationship of the items to more overt measures of meaning. Through such investigation, Wong found the seven factors described earlier that people tend to report as comprising a meaningful life. The PMP, which consists of seven subscales assessing these seven factors, contains 57 items, which are rated on a 7-point Likert scale. The subscales can be analyzed individually or they can be summed to give a single implicit meaning score. Representing factors of Achievement, Relationship, Religion, Self-Transcendence, Self-Acceptance, Intimacy, and Life Fairness, respectively, the PMP contains such items as *I strive to achieve my life goals, I care about other people, I believe that human life is governed by moral laws, I strive to make this world a better place, I accept my limitations, I have someone to share intimate feelings with,* and *I have found that there is rough justice in the world*. In the current study, the PMP total score

was used as the sole indicator of implicit meaning, and it had a coefficient alpha of .96.

Depressive symptoms.   Depressive symptoms were measured with the Depression scale of the Personality Assessment Inventory (Dep; Morey, 1991). The Personality Assessment Inventory is a broad-ranging, clinical assessment device created for measuring "constructs that are central in treatment planning, implementation, and evaluation" (Morey, 1999, p. 1083). It is essentially a more face-valid and interpretable alternative to the MMPI-2. The 344-item, Likert format, self-report inventory contains 11 clinical scales, one of which is the 24-item Dep. The reliability and construct, criterion, and face validity of the Personality Assessment Inventory have been analyzed and demonstrated extensively (Morey, 1999). The Dep contains such positively worded items as *Much of the time, I'm sad for no real reason* and *I hardly have any energy* and such reverse-scored items as *I have no trouble falling asleep* and *Lately I've been happy much of the time*. Participants rate these items on a 4-point scale. In the current study, the Dep had a coefficient alpha of .90.

Hope.   Because hope has been conceptualized both as a stable personality trait and as a temporary state (Snyder, 2002), we employed two different measures of hope in the current study. We used Snyder's Adult State Hope Scale (ASHS; Snyder et al., 1996) to measure hope as a state and Herth's (1991) Hope Scale (HHS) to measure it as a trait. Snyder's scale has demonstrated good construct validity (Lopez, Ciarlelli, Coffman, Stone, & Wyatz, 2000; Snyder et al., 1996). It consists of two factors, one pertaining to an individual's perceived will to certain ends and another to the person's awareness of pathways to those ends. The scale contains six items, such as *If I should find myself in a jam, I could think of many ways out of it* and *At the present time, I am energetically pursuing my goals,* to which participants respond on an 8-point Likert scale. Herth's measure of hope, which has also exhibited good construct validity (Arnau, Rosen, Finch, & Rhudy, 2002; Herth, 1991), taps a broader construct than Snyder's instrument, assessing an additional component related to an individual's perceived support from and feelings of interconnectedness with others. The measure has 30 items, each rated on a 4-point Likert scale. The scale contains such positively scored items as *I can seek and receive help* and *I believe that good is always possible* and such reverse-scored items as *I feel overwhelmed and trapped* and *I feel scared about my future*. For the current study, item number 24 (*I know my life has meaning and purpose*) on the HHS was deleted from all analyses because it asks about perceived meaning in life and is therefore confounded with the two meaning variables currently under investigation. In the current study,

Table 1
Descriptive Statistics and Test-Retest Reliabilities

Scale/sub-scale	Mean			Standard deviation			Test-retest reliability (2 months)		
	Females N = 142	Males N = 49	Total N = 191	F	M	T	F	M	T
LRI-R-framework	34.02	35.57	34.42	5.45	4.45	5.25	.78**	.51	.73
PMP	323.12	319.39	322.16	39.09	48.11	41.49	.80*	.65	.75
Dep	16.11	14.59	15.72	11.01	12.30	11.34	.66	.67	.67
HHS	73.12	71.04	72.59	11.08	11.36	11.16	.75	.72	.74
ASHS	37.77	38.45	37.94	6.05	7.10	6.32	.62	.58	.60
Neuroticism	24.96	23.02	24.47	7.71	8.23	7.87	.72	.70	.72
Conscientiousness	36.63	35.31	36.29	5.68	6.34	5.87	.66	.62	.65
Agreeableness	38.42*	36.71	37.98	4.87	4.83	4.90	.71	.80	.74
Openness	34.14	33.37	33.93	6.20	6.37	6.23	.70*	.85	.74
Extraversion	36.04	34.08	35.53	6.78	7.64	7.04	.80	.79	.80
Social desirability	4.72	5.06	4.81	2.47	2.61	2.50	.59	.64	.60

Note. All test-retest correlations significant at $p < .001$; LRI-R-framework = Life Regard Index Revised Framework subscale, PMP = Personal Meaning Profile, Dep = depression scale from the Personality Assessment Inventory, HHS = Herth Hope Scale (minus Item 24), ASHS = Adult State Hope Scale; Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; Social Desirability measured with Short Form A of the Marlowe-Crowne Social Desirability Scale.
*Females and males differ significantly at $p < .05$,
**Females and males differ significantly at $p < .005$.

the HHS (minus Item 24) had a coefficient alpha of .92, while the ASHS had a coefficient alpha of .82. Attesting to the state-like quality of the ASHS versus the trait-like quality of the HHS, the ASHS and HHS had 2-month test-retest reliabilities of $r = .60$ and $r = .74$, respectively (see Table 1). The fact that the predictor variables (as will be seen) explained more variance over time in ASHS scores than in HHS scores also corroborates the less-reactive, more trait-like quality of the HHS.

Social Desirability.   A shortened version of the Marlowe-Crowne Social Desirability scale (MCSD; Crowne & Marlowe, 1964), which has exhibited adequate construct validity (Crowne & Marlowe, 1964), was used as the measure of Social Desirability. Called Short Form A of the MCSD,

the scale developed by Reynolds (1982) has substantially better psycho-metric characteristics than the original MCSD (Loo & Thorpe, 2000). Short Form A of the MCSD contains such positively scored items as *No matter who I'm talking to, I'm always a good listener* and *I have never felt that I was punished without cause* and such reverse-scored items as *It is sometimes hard for me to go on with my work if I am not encouraged* and *I sometimes feel resentful when I don't get my way*. The scale is an 11-item, true/false test, and in the current study, it had a coefficient alpha of .67.

Big Five personality factors.   Goldberg (1999) has developed the Inter-national Personality Item Pool (IPIP), which is a public domain pool of 1250 concisely worded phrases that assess personality attributes. Using the IPIP, Goldberg (in press) compiled five, 10-item scales that conform well and compare favorably to the domain scales of the NEO-PI-R (Costa & McCrae, 1992). These five scales, the items of which are rated on a 5-point scale, served as the measures of Neuroticism, Conscientiousness, Agreeableness, Openness to Experience, and Extraversion. Goldberg (in press) has described the reliability and validity of these scales. The Neuroticism, Conscientiousness, Agreeableness, Openness, and Extra-version scales had coefficient alphas in the current study of .89, .81, .72, .76, and .87, respectively. The Neuroticism, Conscientiousness, Agreea-bleness, Openness, and Extraversion scales, respectively, contain such pos-itively scored items as *I panic easily, I make plans and stick to them, I make people feel at ease, I enjoy hearing new ideas,* and *I am the life of the party* and such reverse-scored items as *I seldom feel blue, I waste my time, I insult people, I tend to vote for conservative political candidates,* and *I don't talk a lot*.

Procedure

In groups no greater than 50, participants completed all the listed meas-ures in a psychology department classroom. Two months after the first administration, they returned and completed the measures again. Hier-archical regression analysis was used to assess the meaning measures' abilities to explain variance in hope and depression at 2 months beyond variance accounted for by depression/hope, the Big Five, and social de-sirability at baseline. We also used hierarchical regression analysis to test the ability of the hope and depression measures prospectively to predict meaning levels beyond baseline social desirability and Big Five levels. Our basic prediction was that, insofar as meaning levels drive levels of hope/depression and not vice versa, and to the extent that existential meaning is robust and trait-like, the meaning measures should prospectively predict

the hope/depression measures, but hope/depression should not prospectively predict meaning.

RESULTS

Descriptive Statistics

Table 1 contains baseline means and standard deviations, in addition to 2-month test-retest reliabilities, broken down by gender, for all measures. The data indicate that over the 2-month period, the two meaning measures (along with all other measures except those of depressive symptoms, state hope, and social desirability) were fairly stable as suggested by test-retest reliabilities above $r = .70$. However, gender moderated this stability, such that males' test-retest reliabilities for both meaning measures were significantly lower than females'. The diminished temporal stability of meaning for males relative to females could indicate that meaning is more variable over time for men than women, but not too much should be read into the low test-retest correlations for males, due to the small number of men in the current sample.

Zero-Order Correlations

Pearson correlation analyses were performed at baseline and at 2 months to gauge the zero-order relationships between the meaning variables, depressive symptoms, and hope. Results of these analyses at baseline and 2 months, respectively, can be found in Tables 2 and 3. Attesting to the broad relevance of meaning to hope and depression, at both time points, the PMP (implicit meaning) had significant, moderate to large correlations with Dep (depression), HHS (trait hope), and ASHS (state hope), while the LRI-R-framework (explicit meaning) had significant, small to large correlations with these variables. It is clear that both explicit and implicit meaning are related to decreased depressive symptoms and increased hope. The tables also indicate that the PMP and LRI-R-framework had small but significant, positive correlations with social desirability, suggesting that their correlations with other variables be interpreted with some caution. For this reason, and in order to make the longitudinal analyses as conservative as possible, we controlled for baseline social desirability levels in all the subsequent analyses. It should be noted in defense of the PMP and LRI-R-framework that all variables in the

Table 2
Pearson Correlations Between all Variables at Baseline ($N = 191$)

Scale/subscale	PMP	Dep	HHS	ASHS	N	C	A	O	E	SDS
LRI-R-framework	.58**	−.37**	.48**	.52**	−.34**	.44**	.17*	.09	.20*	.21*
PMP		−.58**	.79**	.63**	−.53**	.49**	.43**	.14	.48**	.34**
Dep			−.75**	−.68**	.76**	−.41**	−.32**	.02	−.42**	−.29**
HHS				.68**	−.71**	.48**	.43**	.08	.52**	.33**
ASHS					−.62**	.50**	.27**	.07	.38**	.26**
Neuroticism (N)						−.41**	−.38**	.07	−.52**	−.36**
Conscientiousness (C)							.36**	.09	.24*	.23*
Agreeableness (A)								.21*	.31**	.50**
Openness (O)									.17*	.14
Extraversion (E)										.20*

Note. LRI-R-framework = Life Regard Index Revised Framework subscale, PMP = Personal Meaning Profile, Dep = depression scale from the Personality Assessment Inventory, HHS = Herth Hope Scale, ASHS = Adult State Hope Scale; Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; SDS = Short Form A of the Marlowe-Crowne Social Desirability Scale.
*$p < .05$, **$p < .001$.

Table 3
Pearson Correlations Between All Variables at 2 Months ($N = 191$)

Scale/subscale	PMP	Dep	HHS	ASHS	N	C	A	O	E	SDS
LRI-R-framework	.56**	− .51**	.58**	.67**	− .45**	.54**	.23*	.12	.21*	.26**
PMP		− .64**	.78**	.59**	− .53**	.48**	.44**	.09	.37**	.30**
Dep			− .77**	− .61**	.76***	− .52**	− .38**	.03	− .32**	− .18*
HHS				.65**	− .68***	.55**	.41**	.07	.46**	.25*
ASHS					− .56**	.59**	.24*	.11	.30**	.21*
Neuroticism (N)						− .51**	− .40**	.01	− .39**	− .31**
Conscientiousness (C)							.33**	.12	.29**	.28**
Agreeableness (A)								.20*	.35**	.53**
Openness (O)									.17*	.22*
Extraversion (E)										.23*

Note. LRI-R-framework = Life Regard Index Revised Framework subscale; PMP = Personal Meaning Profile; Dep = depression scale from the Personality Assessment Inventory; HHS = Herth Hope Scale (minus Item 24); ASHS = Adult State Hope Scale; Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; SDS = Short Form A of the Marlowe-Crowne Social Desirability Scale.
*$p < .05$, **$p < .001$.

current study were significantly correlated with social desirability for at least one of the two time points, but only one variable (Agreeableness) had a moderate to large relationship. Also note the multitude of significant correlations that the Big Five personality variables and social desirability had with hope and depressive symptoms (see Tables 2 and 3). It would therefore speak substantially to their unique relevance to hope/depression for the meaning variables to predict variance in 2-month hope/depression levels beyond that predicted by the Big Five and social desirability.

Longitudinal Analyses

Hierarchical regression analysis was used to test the ability of the two meaning variables to prospectively predict depressive symptoms and hope over a two-month period. For each of the meaning measures, three regression analyses were performed predicting HHS, ASHS, and Dep 2 months from baseline. For each regression analysis, baseline levels of hope/depression, social desirability, and all of the Big Five personality variables were entered in Step 1, and baseline levels of the respective meaning measure were entered in Step 2. Tolerance levels for these analyses did not approach .10, and ranged from .34 to .75, suggesting that neither meaning variable's ability to detect variance in the dependent measures was overwhelmingly compromised by variance it shared with the variables entered in Step 1 of each regression. That is, as determined by tolerance levels, multicollinearity did not appear to be a problem in the current regression analyses, results of which are summarized in Tables 4 and 5 for the PMP and LRI-R-framework, respectively. Tables 4 and 5 indicate that both the PMP and LRI-R-framework at baseline significantly predicted levels of depressive symptoms (Dep), state hope levels (ASHS), and trait hope levels (HHS) 2 months later, beyond baseline depression/hope levels, and beyond baseline Big Five and social desirability levels. Each meaning variable predicted depression/hope such that higher meaning levels at Time 1 predicted fewer depressive symptoms and higher hope at Time 2.

For exploratory purposes, we conducted three additional hierarchical regression analyses predicting 2-month levels of depressive symptoms, state hope, and trait hope (controlling for baseline levels, social desirability and the Big Five), but this time, the LRI-R-framework and PMP were entered together in Step 2 so that their ability to

Table 4

Summary of Three Hierarchical Regression Analyses for Baseline Implicit Meaning Predicting 2-Month Levels of Depressive Symptoms, Trait Hope, and State Hope Beyond Baseline Levels of These Variables, the Big Five, and Social Desirability ($N = 191$)

Scale/subscale	Dep β	HHS β	ASHS β
Step 1			
Dep	.50***	—	—
HHS	—	.68***	—
ASHS	—	—	.55***
SDS	.01	− .06	.06
Neuroticism	.24*	− .08	− .10
Conscientiousness	− .01	− .04	.05
Agreeableness	− .08	.10	.00
Openness	.02	.01	.01
Extraversion	.11	− .04	− .13
Step 2			
Dep	.43***	—	—
HHS	—	.48***	—
ASHS	—	—	.43***
SDS	.03	− .08	.04
Neuroticism	.24*	− .13	− .09
Conscientiousness	.04	− .08	.01
Agreeableness	− .05	.09	− .05
Openness	.03	.01	.00
Extraversion	.16	− .08	− .19**
PMP	**− .20****	**.31*****	**.28****

Note. $R^2 = .474$ for step 1 predicting Dep and .494 for step 2; $R^2 = .556$ for Step 1 predicting HHS and .589 for Step 2; $R^2 = .383$ for Step 1 predicting ASHS and .420 for Step 2; Implicit meaning measured with the Personal Meaning Profile (PMP); Depressive symptoms measured with the depression scale from the Personality Assessment Inventory (Dep); Trait hope measured with the Herth Hope Scale (minus Item 24) (HHS); State hope measured with the Adult State Hope Scale (ASHS); Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; SDS = Short Form A of the Marlowe-Crowne Social Desirability Scale.
*$p < .05$, **$p < .01$, ***$p < .001$.

predict aspects of depression and hope independently of one another could be examined. As a block, the two meaning variables predicted significant amounts of residual variance in the dependent variables, as reflected by incremental F-ratios of $F(2,181) = 7.838$ ($p < .001$),

Table 5
Summary of Three Hierarchical Regression Analyses for Baseline Explicit Meaning Predicting 2-Month Levels of Depressive Symptoms, Trait Hope, and State Hope Beyond Baseline Levels of These Variables, the Big Five, and Social Desirability ($N = 191$)

Scale/ subscale	Dep β	HHS β	ASHS β
Step 1			
Dep	.50***	—	—
HHS	—	.68***	—
ASHS	—	—	.55***
SDS	.01	− .06	.06
Neuroticism	.24*	− .08	− .10
Conscientiousness	− .01	− .04	.05
Agreeableness	− .08	.10	.00
Openness	.02	.01	.01
Extraversion	.11	− .04	− .13
Step 2			
Dep	.48***	—	—
HHS	—	.64***	—
ASHS	—	—	.44***
SDS	.03	− .07	.03
Neuroticism	.23*	− .09	− .11
Conscientiousness	.04	− .08	− .02
Agreeableness	− .09	.12	.02
Openness	.03	.00	.00
Extraversion	.11	− .03	− .13
LRI-R-framework	**− .14***	**.14***	**.27***

Note. $R^2 = .474$ for step 1 predicting Dep and .489 for Step 2; $R^2 = .556$ for Step 1 predicting HHS and .571 for Step 2; $R^2 = .383$ for Step 1 predicting ASHS and .433 for Step 2; Explicit meaning measured with the Life Regard Index Revised Framework subscale (LRI-R-framework); Depressive symptoms measured with the depression scale from the Personality Assessment Inventory (Dep); Trait hope measured with the Herth Hope Scale (minus Item 24) (HHS); State hope measured with the Adult State Hope Scale (ASHS); Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; SDS = Short Form A of the Marlowe-Crowne Social Desirability Scale.
*$p < .05$, **$p < .01$, ***$p < .001$.

$F(2,181) = 10.34$ ($p < .001$), and $F(2,181) = 4.418$, ($p < .05$) for trait hope, state hope, and depressive symptoms, respectively. Other aspects of these regression analyses are summarized in Table 6, which

Table 6
Summary of Three Hierarchical Regression Analyses for Baseline
Explicit and Implicit Meaning Predicting 2-Month Levels of
Depressive Symptoms, Trait Hope, and State Hope Beyond Baseline
Levels of These Variables, the Big Five, and Social Desirability
($N = 191$)

Scale/subscale	Dep β	HHS β	ASHS β
Step 1			
Dep	.50***	—	—
HHS	—	.68***	—
ASHS	—	—	.55***
SDS	.01	− .06	.06
Neuroticism	.24*	− .08	− .10
Conscientiousness	− .01	− .04	.05
Agreeableness	− .08	.10	.00
Openness	.02	.01	.01
Extraversion	.11	− .04	− .13
Step 2			
Dep	.43***	—	—
HHS	—	.47***	—
ASHS	—	—	.39***
SDS	.03	− .09	.03
Neuroticism	.24**	− .12	− .10
Conscientiousness	.06	− .10	− .03
Agreeableness	− .07	.10	− .02
Openness	.04	.00	.00
Extraversion	.14*	− .07	− .17*
PMP	− **.15**	**.27****	**.18***
LRI-R-framework	− **.09**	**.07**	**.21****

Note. $R^2 = .474$ for Step 1 predicting Dep and .498 for Step 2; $R^2 = .556$ for Step 1 predicting HHS and .592 for Step 2; $R^2 = .383$ for Step 1 predicting ASHS and .446 for Step 2; Explicit meaning measured with the Life Regard Index Revised Framework subscale (LRI-R-framework); Implicit meaning measured with the Personal Meaning Profile (PMP); Depressive symptoms measured with the depression scale from the Personality Assessment Inventory (Dep); Trait hope measured with the Herth Hope Scale (minus Item 24) (HHS); State hope measured with the Adult State Hope Scale (ASHS); Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; SDS = Short Form A of the Marlowe-Crowne Social Desirability Scale.
*$p < .05$, **$p < .01$, ***$p < .001$.

Table 7
Amount of Common and Unique Variance that Baseline Explicit and Implicit Meaning Predicted in 2-Month Levels of Depressive Symptoms, Trait Hope, and State Hope Beyond Baseline Levels of These Variables, the Big Five, and Social Desirability ($N = 191$)

	Unique implicit meaning	Unique explicit meaning	Common variance
Depressive symptoms	.009	.004	.011
Dispositional hope	.021	.003	.012
State hope	.013	.026	.024

Note. Explicit meaning measured with the Life Regard Index Revised Framework subscale; Implicit meaning measured with the Personal Meaning Profile; Depressive symptoms measured with the depression scale from the Personality Assessment Inventory; Trait hope measured with the Herth Hope Scale (minus Item 24); State hope measured with the Adult State Hope Scale; The Big Five domains of Neuroticism, Conscientiousness, Agreeableness, Openness, and Extraversion measured with Goldberg's domain scales from the International Personality Item Pool; Social Desirability measured with Short Form A of the Marlowe-Crowne Social Desirability Scale.

indicates that neither variable uniquely predicted significant amounts of variance in depressive symptoms, only the PMP uniquely predicted variance in dispositional hope, and both variables uniquely predicted variance in state hope. Table 7 summarizes the amount of common and unique variance (controlling for personality, social desirability, and baseline hope/depression levels) that implicit and explicit meaning predicted in 2-month levels of the dependent variables. The results summarized in Tables 6 and 7 suggest that the variance shared by implicit and explicit meaning is linked prospectively to the part of depression unaccounted for by its relationship with the Big Five or social desirability; that both shared variance and variance unique to implicit meaning are linked prospectively with the part of dispositional hope unaccounted for by its relationship with the Big Five or social desirability; and that shared variance, variance unique to implicit meaning, and variance unique to explicit meaning are linked prospectively with the part of state hope unaccounted for by its relationship with the Big Five or social desirability. Such results underscore the complexity of meaning's relationship with mental health and the importance of analyzing both

common and unique factors within the overarching construct of existential meaning.

Finally, two hierarchical regression analyses testing the ability of the hope/depression measures to predict PMP and LRI-R-framework scores at 2 months, beyond baseline meaning levels, social desirability, and the Big Five, suggested that they did not prospectively predict significant amounts of variance in meaning. That is, the hope and depression measures predicted 1% of the variance in PMP scores, incremental $F(3, 180) = 1.27$ (ns), and 1% of the variance in LRI-R-framework scores, incremental $F(3, 180) = 1.02$ (ns).

DISCUSSION

Meaning and Mental Health

Regarding the cross-sectional analyses, implicit and explicit meaning were related to decreased depressive symptoms and increased levels of trait hope and state hope. This suggests that in a nonclinical, young adult population, individuals with high levels of meaning tend to have fewer symptoms of depression, to be more characterologically hopeful, and to be more likely to be experiencing states of hope than individuals with low levels of meaning. Such results combine with other data to suggest that existential meaning has a relationship with mental health that endures across a diversity of contexts. For instance, complementing the current finding of linkages to hope and depressive symptoms within a young adult population, the LRI-framework has been found within populations of unemployed mothers and elderly adults to have positive correlations with life satisfaction, psychological well-being, and positive affect, and negative correlations with psychological distress and negative affect (Zika & Chamberlain, 1992); within a population of college students to be correlated positively with measures of elation, happiness, and life satisfaction, and negatively with anxiety and depression (Debats, 1990); within populations of *distressed* college students to be correlated positively with happiness and negatively with symptoms of depression, agoraphobia, anxiety, somatization, interpersonal sensitivity, sleep disturbance, and general psychological distress (Debats et al., 1993); and within samples of general population adults to be correlated positively with happiness (Debats et al., 1993; Scannell et al., 2002) and spiritual wellbeing (Harris & Standard, 2001;

Scannell et al., 2002), and negatively with hopelessness (Harris & Standard, 2001), depressive symptoms (Debats et al., 1993, Scannell et al., 2002), and a variety of other symptoms of psychological distress (Debats et al., 1993; Scannell et al., 2002). As for measures other than the LRI-framework, Mascaro et al. (2004) found within a population of college students that the newly developed Spiritual Meaning Scale, which measures beliefs about the meaningfulness of life itself and the derivation of a sense of calling from such meaning, to be correlated appropriately with depression, anxiety, hope, and antisocial characteristics and to explain unique variance relative to the Big Five and social desirability in all these variables except anxiety.

   To the above summarized cross-sectional data, the current study adds valuable information pertaining to existential meaning's *unique* and *longitudinal* relationship with depressive symptoms and hope, for in the current study meaning prospectively predicted aspects of depressive symptoms and hope in addition to those aspects related to social desirability and the personality characteristics of Neuroticism, Conscientiousness, Agreeableness, Openness to Experience, and Extraversion. The current data therefore emphasize the ability of meaning to inform and perhaps even affect aspects of mental health that are not informed or affected by other personality variables. In the only longitudinal investigation of meaning besides the current one that used similarly acceptable measurement devices, Debats (1996) analyzed pre- and posttreatment levels of psychiatric symptoms, happiness, and self-esteem in 105 patients with various, nonpsychotic disorders as determined by DSM-III criteria, finding that LRI-framework at pretreatment predicted posttreatment happiness and symptom levels, controlling for initial happiness and symptom levels. Thus, the current study combines with Debats' (1996) to suggest a potential causal influence for meaning on psychological health. Our results suggest influence within a nonclinical population, and Debats' suggest influence within a clinical population.

   Our results and those of Debats (1996) are consistent with the existentialist position that a sense of meaning in life has unique causal influence on mental health. Such results do not speak to whether the influence is by virtue of meaning's serving as a resiliency factor that helps individuals maintain perspective, direction, and motivation in the face of distressing circumstances—thereby affecting mental health by serving as a stress moderator—or whether

the influence is by virtue of a more immediate connection between loses/gains in meaning and deteriorations/improvements in mental health. In much of existential theorizing, meaning is conceptualized as a stress buffer (Frankl, 1992; Maddi, 1967; Yalom, 1980), with those high in meaning having a resiliency against decompensation in the face of stress and individuals low in meaning having a vulnerability to stress-induced emotional problems. But this does not preclude meaning from serving as a more direct mediator of mental health. For example, it is not difficult to imagine the confusion and turmoil that could result directly from taking a hit to one's meaning system, or the affective lift one might experience immediately upon coming to an understanding of life and one's place in it, or arriving at a unique purpose that one feels particularly meant to pursue. Regardless, it should be clear that we think existential meaning serves as both a resiliency factor and a direct mediator of mental health. It does this, we suspect, by serving as an energizer as well as a stabilizer (i.e., it can provide motivation/drive in addition to direction/structure), with such energy and direction helping individuals to actively, mindfully, and hopefully engage in life. To the extent that individuals engage in life in such a manner, they have a unique immunity against the development of hopelessness and depression. But to the extent that their system of meaning is not robust, they are at risk for experiencing sudden drops in meaning, consequent losses of motivation and direction, and, therefore, sudden increases in hopelessness and depression. Of course, research must be conducted to test such speculation.

Implicit Versus Explicit Meaning

The current study is the first time, to our knowledge, that explicit and implicit meaning have been compared to one another as they relate to mental health. In terms of the differential relationships of implicit and explicit meaning to unique aspects of hope/depression, their *shared* variance seemed most consistently related to hope and depressive symptoms, although implicit meaning did have a relationship with dispositional hope that was unique from explicit meaning, and both implicit and explicit meaning explained portions of variance in state hope that were unique from one another. Such outcomes indicate that there may be something about the attitudes and behaviors in the implicit meaning construct (i.e., self-transcend-

ence, achievement, religiosity, intimacy, sociality, justice, and self-acceptance) that is inherently healthy and linked prospectively to dispositional and situational hope regardless of whether or not it leads to an explicit sense of meaning. Likewise, there may be something about having an explicit sense of meaning that is linked prospectively to situational hope regardless of whether or not that explicit sense of meaning revolves around the normatively valued attitudes and behaviors of implicit meaning. Most notably, however, it is that portion of meaning involving both an explicit sense of coherence and purpose *and* demonstration of the behaviors and attitudes comprising implicit meaning that are linked prospectively to trait hope, state hope, and symptoms of depression.

Influencing Meaning

One aspect of the current study that could be viewed either as a weakness or an asset is the young age of its sample, which consisted entirely of incoming college undergraduates who are likely just beginning to solidify their meaning and purpose in life. Though the implications of a population that is less versus more secure regarding meaning in life are not entirely clear, a newly developed meaning system is likely to be less robust than one that is better established and has endured a greater number of challenges. In any case, results of the present study imply that college students could benefit from addressing the issue of existential meaning and that counseling psychologists should become familiar with the factors that can promote a sense of existential meaning.

   Our short answer to the question of how to promote a sense of existential meaning is that meaning, like happiness (Frankl, 1988, 1992), is one of those things one must achieve without pursuing it directly (Yalom, 1980, 2002). That is to say, an authentic sense of meaning in life cannot be imposed, forced, hammered out of iron but must emerge from relating openly to others, the world, and oneself. In his analysis of implicit meaning, Wong (1998a) uncovered eight sources from which meaning often emerges, including the seven categories already discussed plus an affective-fulfillment category. Evidently, individuals derive meaning from achieving valued goals, engaging in self-transcendent activities, perceiving a rough degree of fairness in the world, accepting their limitations, engaging in intimate emotional relationships with others, being sociable and well

liked, having a relationship with a higher power, and experiencing positive emotions. Some more concrete areas of living that are commonly cited sources of meaning are work, love and marriage, childbirth, and engagement in independent, avocational activities (Baum & Stewart, 1990). In general, this and other (Debats, 1999; Debats et al., 1995; Moore, 1997) empirical literature seem to converge with theory (Yalom, 1980) in highlighting connectedness or engagement with life as the primary springboard to existential meaning, while perceived alienation from others and the world appears to be the primary source for a sense of meaninglessness. It is our opinion that a sense of meaning in life is a natural consequence of experiencing in a balanced, mindful, and unbiased manner the various fruits that existence offers. Of course, some of the more common fruits are the various activities found in Wong's analyses, which mostly fall into the categories of relating to others and the world, relating to oneself, and relating to whatever it is that allows self to relate to others (one can call it Meaning itself, the world, Existence, Nature, Being, Life, God, Tao, Spirit …). And when something within an individual blocks her from engaging in those activities from which most people naturally derive meaning, or when something within her inhibits awareness of the meaningfulness of the activities in which she is already engaged, then this is existential psychopathology.

As for dealing with psychopathology via meaning-focused interventions, the previous paragraph implies that meaning-oriented therapies would involve subverting the factors that block the experience of existential meaning. Dealing with these impediments to meaning can be an integrative process that incorporates behaviorally conceived blocks of meaning, cognitively conceived blockages, and dynamically conceived ones. From a behavioral perspective, some individuals do not give themselves the opportunity to experience meaning in life, because they simply are not engaged in the right sort and number of behaviors. From a cognitive perspective, factors in attention and memory such as automatic thoughts, core beliefs, schemata, or a simple absence of mindfulness to what one is doing can either interfere with the experience of meaning or they can supply individuals with a rigid and unfulfilling meaning. From a dynamic perspective, many individuals unconsciously avoid dealing with the issue of meaning, for fear that no meaning will be found, or for fear of reflecting on all the potentials that have gone unrealized that would only be actualized through blood, tears, and toil. Frankl

(1988, 1992), Yalom (1980, 2002), Maddi (1998), and Wong (1997, 1998b) describe psychotherapeutic approaches that purport to affect mental health partially through their effects on existential meaning. A description of these forms of psychotherapy is beyond the scope of this paper, but it suffices to say that they all stress the promotion of action and engagement, decision making, the affirmation of some sort of freedom even in the face of the unavoidably bad, and countering avoidance of existential concerns.

Study Limitations and Future Directions

The current study contains several issues that require addressing. The sample in the current research was overrepresented by Caucasians relative to minority races and females relative to males. Therefore, there is a need to conduct similar studies in more diverse populations, including clinical populations and minority populations, and also to look at interactions between meaning and sex or cultural variables. In the current sample, for instance, the two meaning measures exhibited greater stability over time for women than for men, and the extent to which this is a general phenomenon or sample specific ought to be researched.

Another weakness of the current study, dictated by its sample size, was its utilization of regression techniques that assume variables are measured without error, rather than modeling procedures that rely on more realistic assumptions. We encourage the execution of future studies that employ more statistically sophisticated modeling procedures, as well as more intricate tests of theory. For example, we propose that existential meaning enhances both the energy in which one engages in one's daily activities as well as the mindfulness in which one approaches those activities. Future research might involve modeling meaning's linkages over several time points with depression and hope, the extent to which those linkages are mediated by mindful but energetic behavioral engagement, and—in accord with traditional existential theory that views meaning as a stress buffer— the extent to which those linkages are moderated by stress. Such research would not only reveal a wealth of knowledge about factors that could optimize human functioning, it would serve the integrative function of bringing together concepts from diverse areas of psychology, such as existential and humanistic, interpersonal and social, and behavioral domains. If meaning's linkages with mental

health were found to be mediated by mindfulness and behavioral engagement, this could potentially unite existential and humanistic psychotherapeutic orientations that focus on meaning with cognitive orientations centered around mindfulness (eg., Baer, 2003) as well as behavioral orientations focusing on behavioral activation (e.g., Jacobson, Martell, & Dimidjian, 2001). Findings that suggest that interpersonal connectedness is a primary source of meaning (Debats, 1999; Debats et al, 1995; Moore, 1997) bring social and interpersonal considerations into play.

The construct of existential meaning includes a diversity of sub-constructs such as those described in the current study, in addition to others (e.g., spiritual meaning, see Mascaro et al., 2004). These sub-constructs need not have identical relationships with mental health, and the ways they interact with one another require further analysis. For example, a data set we have recently accumulated and submitted for review suggests that when one's explicit sense of meaning is connected to spirituality (i.e., a sense of participation in something transcendent), it appears to moderate the impact of stress on depressive symptoms, but this does not occur if one's explicit sense of meaning is only personal or not tied to something beyond the individual. Of course, the idea of implicit meaning, of doing the things that are thought to lead to a meaningful life, leads to infinite pondering. For instance, which of the seven implicit meaning factors are most closely linked to explicit meaning or to mental health? Should they be analyzed separately or as one nonreducible gestalt? Clearly, the current study generates more questions than it answers, but it points in straightforward directions that have straightforward consequences for the improvement of emotional well-being.

The study of existential meaning and its relationship with mental health is an area that could promote increased integration not only within psychology but also between psychology and fields like anthropology, philosophy, religion, medicine, and education. We hope the current findings suggest to members of these disciplines that the construct of existential meaning is to a useful degree measurable and uniquely related to enhanced mental health, and that it ought to be subjected to further empirical investigation. Although much work remains to be done, there is enough evidence to support researching the effects of meaning-centered interventions on psychological health (which involves optimizing positives as much as overcoming negatives). Independent of this, the fact that humans seem to have a

powerful will toward finding meaning in existence suggests that existential meaning is a good in itself and something we should pursue not just for its utility but because in our heart of hearts, we desire meaning and know that it can be found.

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