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Career Development Strivings

Assessing Goals and Motivation in Career Decision-Making and Planning

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This article describes and demonstrates a novel approach to assessing goals and motives among individuals engaged in the career decision-making and planning process. Participants generated five career development strivings, rated each striving along several dimensions (self-efficacy, outcome expectations, sense of calling, spiritual significance, and materialism), and completed measures of conceptually related and unrelated variables. Results indicated adequate to strong internal consistency reliability for the strivings appraisal scale scores, and the pattern of correlations support the convergent and discriminant validity for scores obtained using this approach. We conclude that the career development strivings strategy has great potential as a flexible and efficient tool for use in career development research and practice.

Keywords: *calling, career goals, career strivings, materialism, outcome expectations, self-efficacy, spirituality*

Personal goals play a critical role in healthy human functioning (Locke & Latham, 2002). Goals help direct and maintain behavior on tasks that may provide only distant rewards. Therefore, effective goal-setting behavior clearly is important in career decision-making, a complex process often requiring delay of gratification, careful prioritizing and planning, and personal action.

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Counselors have recognized the advantages of helpful goals; in counseling contexts, research suggests that structured client goals and high levels of client involvement in goal-oriented behavior lead to greater client mental health and satisfaction (e.g., Hall & Foster, 1977; Willer & Miller, 1976). Clients seeking career counseling also benefit from interventions employing effective goal-setting strategies (Young & Valach, 2003; Wehmeyer et al., 2003). Many psychotherapists and career development practitioners use ad hoc approaches for assessing the idiosyncratic goals of clients. However, strategies for assessing the role of personal goals in the career development process have not been well developed in the research literature.

The purpose of this article is to describe, provide an example of, and present initial psychometric evidence for a novel approach to assessing goals and motivation for individuals engaged in the career decision-making and planning process. The inspiration for our approach comes from personality psychology, where researchers have developed strategies to investigate the extent to which individuals' priorities, goals, and concerns account for variability in well-being (Brunstein, 1993; Canter, 1990; Emmons, 1999; Klinger, 1987; Little, 1989). Typically, this research defines such goals as "personalized choices that individuals make as they direct their lives toward certain outcomes and away from others" (Emmons & Kaiser, 1996, p. 81) and assesses peoples' goals by asking participants to generate a list of strivings that they are currently attempting to accomplish. Participants then rate each striving along several criteria (e.g., self efficacy, difficulty, meaningfulness) or report behaviors that are related to the accomplishment of that particular striving. Although personal goal systems in the personality literature are typically assessed without regard to a particular life domain, the measurement approach lends itself well to adaptation for use in assessing goals within a specific domain. For the present article, we adapted Emmons' (1986, 1999) measure of personal strivings, defined as things that persons "typically or characteristically are trying to do in their everyday behavior" (Emmons, 1996, p. 32), for use in the domain of career development.

There are two primary advantages of using the strivings approach to measure career development goals and motivations. First, the strivings approach provides a useful strategy for assessing nomothetic motives for ideographic goals (Emmons, 1999). That is, the approach allows researchers to assess individual differences in the extent to which participants are driven by particular types of motives (which the researcher can specify) as they pursue each of their own self-generated, idiosyncratic goals. This strategy is ideal for researchers interested in understanding characteristics of individuals'

underlying motivations in pursuing their goals in addition to, or irrespective of, the specific content of the goals. We offer two examples to illustrate this point, drawing from key constructs in Social Cognitive Career Theory (SCCT; Lent, Brown & Hackett, 1994).

SCCT (Lent et al., 1994) postulates that people exercise agency through the interaction of their self-efficacy beliefs, outcome expectations, and personal goals related to particular tasks they face in the career decision-making and planning process. Self-efficacy beliefs refer to people's confidence in their ability to effectively perform a task, whereas outcome expectations refer to people's beliefs about the outcome of successful performance for that task. Personal goals, in turn, refer to people's intentions to engage in a task or generate an outcome. According to the theory, people are likely to persist in goal-directed behavior for which they have high levels of self-efficacy, provided that valued outcomes are expected to result from the behavior. SCCT views this process as integral to the development of interests, to choice behavior, and to work performance. A key aspect of SCCT related to the present article is that the theory places greater theoretical emphasis on an individual's self-efficacy and outcome expectations for a particular task than on the specific content of the task itself. Extant approaches to measuring these constructs have targeted particular task domains (such as math and science or career decision-making) but have not examined the unique, specific task goals generated by the individual. For the purposes of illustrating the strivings approach in the present study, we asked participants to identify their career development goals and rate each in terms of their self-efficacy (i.e., confidence in successfully attaining the goal) and outcome expectations (i.e., likelihood that attaining the goal will lead to a successful career) for that specific goal. Our approach to assessing outcome expectations differs from the typical approach, in which participants are provided with a set of positive outcomes and asked to indicate the likelihood that each would result from a particular behavior (Lent & Brown, 2006). However, it reflects our interest in participants' perceptions of how well their strivings would contribute to establishing a successful career, broadly defined.

A second advantage of the strivings approach is its flexibility and efficiency for assessing features of people's motives for pursuing their goals. Traditional approaches to measuring different aspects of goal pursuits ordinarily require the use of separate, multi-item measurement scales for each variable to provide reliable scores. Flexibility and efficiency are therefore enhanced by the strivings approach in that once participants' strivings are generated, researchers can assess multiple variables of interest using a single

rating criterion for each variable. This advantage may be especially benefi-cial in investigating under-researched domains for which psychometrically sound scales have not yet been developed. We offer three additional examples to illustrate this point, drawing from under-researched topics in the career domain: spirituality and religion, calling and vocation, and materialism.

First, although investigators have begun to study the role of spirituality and religion in career decision-making (Duffy, 2006), research has not yet investigated specific mechanisms that may link these variables in the career development process. One such mechanism may be found in the extent to which individuals perceive their career development goals as having spiritual qualities or significance. The application of spiritual or religious qualities to life domains and goals, referred to as "sanctification" (Mahoney, Pargament, Murray-Swank, & Murray-Swank, 2003), is theoretically relevant for adher-ents of all major world religions (Emmons, 2000). However, no research has investigated sanctification in the work domain, although evidence related to the role of sanctification in other life domains (e.g., Mahoney et al., 2003; Mahoney et al., 2005) suggests that it may be beneficial for career develop-ment and work-related outcomes.

A related area of investigation posits that many individuals may approach their career development pursuits in light of a sense of calling. Dik and Duffy (in press) recently defined "calling" as an orientation toward work motivated by a transcendent or external summons to integrate work with one's overall sense of purpose and meaningfulness in life and with "other oriented" values and goals. Despite methodological limitations, research has found that people who approach work as a calling report higher levels of general and work-specific well-being relative to those with other approaches to work (e.g., Davidson & Caddell, 1994; Treadgold, 1999; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). However, as is the case for constructs related to spirituality and religiousness, researchers have not assessed the extent to which participants perceive goals for their career decision-making process to be motivated by a sense of calling.

A third area of investigation targets the phenomenon of approaching one's career as a means to materialistic ends; that is, a path to accruing power, sta-tus, or wealth. Materialistic goals are related to increased value placed on financial security and decreased value placed on relationships (Richins & Dawson, 1992), and highly materialistic people have been demonstrated to donate less money to charity and churches, give less to family, and spend more on themselves relative to less materialistic people (Belk, 1984). Materialism also has been found to correlate negatively with self-esteem and life

satisfaction and positively with envy (Belk, 1984). Evidence concerning extrinsic work motivation, a construct conceptually related to materialism, is complex, but suggests that extrinsic factors often are detrimental to desirable work attitudes and outcomes (e.g., creativity, cognitive flexibility, and problem solving; Gagne & Deci, 2005).

We propose that the strivings approach holds promise as a means of better understanding the factors that influence the various routes people pursue to developing their careers. In the remainder of this article we demonstrate an application of the career strivings strategy for assessing self-efficacy beliefs and outcome expectations held by participants for each of the idiosyncratic career development goals they report. We also report an effort to assess the extent to which participants perceive that their self-generated career development goals are spiritual in nature, are pursued because of a sense of calling, or are pursued for materialistic goals pertaining to power, wealth, and prestige. The internal consistency reliability and construct validity of this assessment approach are investigated, including examination of correlations among the striving appraisal scales and with measures of conceptually similar and dissimilar criterion variables. Our expectations for the pattern of these correlations were as follows:

1. *Strivings Appraisal Scale Intercorrelations*. Self-Efficacy and Outcome Expectations Strivings will be more closely associated with each other than with scores on strivings variables conceptualized as less similar (Sense of Calling, Spiritual, and Materialism Strivings). Similarly, Sense of Calling Strivings and Spiritual Strivings will be more strongly associated with each other than with less conceptually similar strivings variables (Self-Efficacy and Outcome Expectations Strivings) and will be negatively related to Materialism Strivings.
2. *Correlations of Strivings Appraisal Scales with Trait Measures.* Self-Efficacy and Outcome Expectation Strivings will be more closely associated with career decision self-efficacy scale scores and intrinsic work motivation than with extrinsic motivation, calling, meaning in life, religious commitment, and materialism scores. Sense of Calling Strivings will be strongly correlated with calling scale scores, positively (but less strongly) associated with intrinsic work motivation, meaning in life and religious commitment, and negatively related to materialism scale scores. Spiritual Strivings will be strongly correlated with religious commitment, positively (but less strongly) associated with intrinsic work motivation, meaning in life, and calling scale scores, and negatively correlated with materialism scale scores. Finally, Materialism Strivings will be positively associated with materialism scale scores and extrinsic work motivation.

Method

Participants

The sample consisted of 255 students ($n = 183$ females; $n = 72$ males) from a midsized Midwestern Catholic university ($n = 51$) and a large Midwestern research university ($n = 204$). The sample reported a mean age of 19.54 years ($SD = 2.21$), and was predominantly White (85.9%) and Asian American (10.2%), with the remaining 3.9% consisting of African American, African, Asian/Pacific Islander, Hispanic/Latino, Persian American, biracial, and other (one individual did not reply to this item). Most of the sample, 56.1%, were in their 1st year of college, 23.5% were in their 2nd year, 10.6% were in their 3rd year, 5.1% were in their 4th year, and the remaining 4.8 % consisted of 5th year, nondegree seeking, and "other" students.

Procedure

Most participants were offered course credit in exchange for their participation; a small number ($n = 19$) from the Catholic university volunteered to participate in exchange for being entered in a drawing for a $25 gift card. Individuals indicated their interest in participating in the study by sending an e-mail to a secure account created for the purpose of the study. A reply message was sent containing a study identification number and a link to a secured Web-based consent form and survey, which could be completed from any computer with Internet access. After electronically indicating their consent, participants were directed to the survey.

Instruments

Career Development Strivings and Strivings Appraisals. Participants were presented with a description of the concept of career development strivings and subsequently were asked to list five of their current strivings in an open-ended, sentence completion format. These instructions, adapted from Emmons' (1999) personal strivings measure, are presented in the Appendix. Participants then were instructed to rate each striving along several criteria using a 5 point scale (1 = *Not at all true*, 2 = *To a small extent*, 3 = *To a moderate extent*, 4 = *To a large extent*, 5 = *This is completely true*). These criteria included the extent to which participants (a were confident that they could attain the goal, (b) viewed the goal as helpful in leading them to a successful career, (c) pursued the goal because of a sense of calling, (d) appraised the goal as spiritual

in nature, and (e) viewed the goal as related to gaining power, status or wealth. These ratings were summed for each category across the five strivings, resulting in five striving appraisal scales labeled Self-Efficacy Strivings, Outcome Expectation Strivings, Sense of Calling Strivings, Spiritual Strivings, and Materialism Strivings. For each scale, higher scores indicate higher levels of the dimension being measured by the scale.

Career Decision Self-Efficacy. Career decision self-efficacy was measured using the short-form, 5-level response version of the Career Decision Self-Efficacy Scale (CDSE-SF; Betz, Hammond & Multon, 2005). The CDSE-SF consists of 25 items in which participants rate their confidence in their abilities to successfully perform a number of career decision-making tasks (1 = *No confidence at all*, 2 = *Very little confidence*, 3 = *Some confidence*, 4 = *Considerable confidence*, 5 = *Complete confidence)*. Responses were summed to provide a total score for the variable, with higher scores indicating a greater degree of self-efficacy. Evidence for reliability and validity of the instrument have been well established (Betz et al, 2005; Betz, Klein & Taylor, 1996), with internal consistency reliability coefficients ranging from .94 to .95 and with correlations in expected directions with measures of vocational identity, career decision variables, hope, goal stability, and positive and negative affect (Betz et al., 2005). The internal consistency reliability coefficient among participants in the present sample was $\alpha = .92$.

Intrinsic and Extrinsic Work Motivation. The college student version of the Work Preference Inventory (WPI; Amabile, Hill, Hennessey, & Tighe, 1994) was selected as the measure of intrinsic and extrinsic work motivation in the present study. The WPI consists of 30 items that use a 4-level response continuum (1 = *Never or almost never true of you,* 2 = *Sometimes true of you*, 3 = *Often true of you*, 4 = *Always or almost always true of you*). Responses were summed to provide total scores, with higher scores indicating a greater degree of intrinsic motivation (on the intrinsic scale) or extrinsic motivation (on the extrinsic scale). Items for the Intrinsic and Extrinsic scales have been demonstrated to load on separate factors, and the scale scores have adequate evidence for reliability ($\alpha = .79$ and $\alpha = .78$, respectively, for both the present sample and for participants in Amabile et al., 1994) and construct validity, correlating in expected directions with scores on other motivation measures and with personality and interest inventory scores (Amabile et al., 1994).

Presence of Calling. The extent to which participants viewed their career as a calling was assessed using two items developed by Dik and Steger

(2006) as part of their Brief Calling Scale (BCS): "I have a calling to a particular kind of work" and "I have a good understanding of my calling as it applies to my career." The items used a 5-level response criteria (1 = *Not at all true of me*, 2 = *Mildly true of me*, 3 = *Moderately true of me*, 4 = *Mostly true of me*, 5 = *Completely true of me*) and were summed to form a scale score. Responses for the two items correlated $r = .78$ among participants in the present study. Higher scores indicated greater agreement with the statements affirming the perceived presence of a calling. Scores on the scale have correlated in expected directions with criterion variables such as career decidedness ($r = .48$), career decision self-efficacy ($r = .34$), and presence of meaning in life ($r = .35$) (Dik & Steger, 2006).

Meaning in Life. Participant's appraisals of the extent to which their lives are meaningful were assessed using the 3-item short form of the Presence of Meaning subscale of the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi & Kaler, 2004). MLQ items use a 7-level response scale (1 = *Absolutely untrue,* 2 = *Mostly untrue,* 3 = *Somewhat untrue,* 4 = *Can't say true or false,* 5 = *Somewhat true,* 6 = *Mostly true,* 7 = *Absolutely true*) and were summed to form a total score, with higher scores indicating a greater sense of meaning in life. Scores on the Presence of Meaning dimension have demonstrated strong evidence for test-retest reliability (.70 over one month; Steger et al., 2004) and internal consistency reliability (αs range from .82 to .86 in Steger et al., 2004, and was .81 for the short form in the present sample). Presence of Meaning scores also have received support for convergent validity based on their correlations with other meaning scales and on correlations between self- and informant-ratings (Steger et al., 2004).

Religious Commitment. The Religious Commitment Inventory-10 (RCI-10) (Worthington, Wade, & Hight, 2003) is a 10-item scale measuring participant's interpersonal and intrapersonal religious commitment. The items use a 5-level response format (1 = *Not at all true of me*, 2 = *Somewhat true of me*, 3 = *Moderately true of me*, 4 = *Mostly true of me*, 5 = *Totally true of me*), and responses are summed to form a total score, with higher scores indicating a greater level of religious commitment. The RCI-10 has three week test-retest reliability coefficients ranging from .84-.87 (Worthington et al., 2003) and an internal consistency reliability estimate in the present sample of $\alpha = .95$, within the range of .88 to .98 across samples reported by Worthington et al. (2003). Scores on the RCI-10 also have correlated positively with self-reported attendance of religious events, self ratings of spirituality, and reported spiritual intensity (Worthington et al., 2003).

Materialism. The Materialism Scale (Richins & Dawson, 1992) is an 18-item scale with a 7-level response format (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Slightly Disagree*, 4 = *Neither Agree nor Disagree*, 5 = *Slightly Agree*, 6 = *Agree*, 7 = *Strongly Agree*) measuring participant's reported beliefs about materialism as a value. Scores on the scale were summed to form a total score, with higher scores indicating greater levels of materialistic values. Three week test-retest reliability for the Materialism Scale is .87, and the internal consistency reliabilities range from .80 to .88 (.89 in the present sample). Scores on the Materialism Scale also are positively correlated with envy and negatively correlated with generosity, donating behavior, and life satisfaction (Richins & Dawson, 1992).

Results

Means, standard deviations, and ranges for the present sample on all scales included in the study are presented in Table 1. Cronbach alpha estimates reveal moderate to strong support for the internal consistency reliability of scores generated by the five strivings appraisal scales (see Table 2). Somewhat lower coefficients were found for Outcome Expectations and Self-Efficacy Strivings than for the other three striving appraisal scales; this was unsurprising given that in contrast to the latter three characteristics, outcome expectations and self-efficacy theoretically do not represent global traits but are task-specific. That is, internal consistency coefficients likely reflect the coherence of the content of strivings as well as the consistency of ratings for outcome expectations and self-efficacy.

The patterns of intercorrelations among strivings appraisal scale scores are reported in Table 2. Scores on the measures of Outcome Expectation Strivings and Self-Efficacy Strivings, both of which were derived from SCCT, were more highly correlated with each other ($r = .61$) than with Sense of Calling Strivings, Spiritual Strivings, or Materialism Strivings. That is, the second largest correlation among these variables was $r = .34$ between Sense of Calling and Outcome Expectations Strivings; Williams' t-test for dependent correlations revealed this coefficient to be significantly smaller, $t(252) = 4.32$, $p < .001$. Sense of Calling Strivings and Spiritual Strivings, both of which connote a sense of transcendence and meaning, were positively correlated ($r = .42$); the magnitude of this coefficient was not significantly different than that found for Sense of Calling and Outcome expectations ($r = .34$; $t[252] = 1.03$, $p = .15$) but was significantly larger than all other correlations of the

Table 1
Means, Standard Deviations, and Ranges for All Measures

Variable	Mean	SD	Range
Strivings Appraisal Scales			
1. Outcome Expectation Strivings	20.74	2.73	12.00–25.00
2. Self-Efficacy Strivings	20.23	3.10	10.00–25.00
3. Sense of Calling Strivings	15.62	5.01	5.00–25.00
4. Spiritual Strivings	11.33	5.19	5.00–25.00
5. Materialism Strivings	14.24	5.63	5.00–25.00
Criterion Scales			
6. CDSE-SF	93.26	13.46	57.00–125.00
7. Intrinsic Motivation	42.25	5.78	25.00–59.00
8. Extrinsic Motivation	40.50	6.22	19.00–57.00
9. Calling	6.11	2.10	2.00–10.00
10. Meaning in Life-SF	14.33	3.32	5.00–21.00
11. Religious Commitment	22.97	10.26	10.00–50.00
12. Materialism	70.70	16.39	26.00–112.00

Note. CDSE-SF refers to the Career Decision Self-Efficacy Scale, Short Form.

two variables with Outcome Expectations and Self-Efficacy Strivings (i.e., next largest was $r = .23$, $t[252] = 2.33$, $p < .05$). Contrary to expectations, Sense of Calling and Spiritual Strivings were positively, although weakly, correlated with Materialism Strivings ($r = .19$ and $r = .12$, respectively). Overall, the intercorrelations among striving appraisals indicated several distinct dimensions that, with the possible exception of Materialism Strivings, were related to each other in predictable and reasonable ways and thus supportive of their construct validity.

The correlations between striving appraisal scales and measures of other criterion variables also are reported in Table 2. Outcome Expectations Strivings scores demonstrated a moderate positive correlation with CDSE ($r = .30$), which was significantly larger than its correlations with calling ($r = .12$, $t[252] = 2.52$, $p < .01$), meaning in life ($r = .10$, $t[252] = 3.03$, $p < .01$, religious commitment ($r = .09$, $t[252] = 3.80$, $p < .001$), and materialism scores ($r = .14$, $t[252] = 1.94$, $p < .05$), and larger at a marginal level of significance than its correlation with extrinsic motivation ($r = .17$, $t[252] = 1.54$, $p = .06$). The correlation of Outcome Expectations Strivings with intrinsic motivation was smaller ($r = .23$) and only significantly larger than its correlations with meaning in life ($t[252] = 1.66$, $p < .05$) and religious commitment ($t[252] = 1.72$, $p < .05$). Self-Efficacy Strivings scores also exhibited a moderate

Table 2
Cronbach Alphas, Intercorrelations, and Convergent and Discriminant Correlations for Career Development Strivings Appraisal Scales

Strivings Variable	1	2	3	4	5	CDSE-SF	Intrinsic Motivation	Extrinsic Motivation	Calling	Meaning in Life	Religious Comm.	Materialism
1. Outcome Expectation	(.69)					.30**	.23**	.17**	.12	.10	.09	.14*
2. Self-Efficacy	.61**	(.72)				.28**	.28**	.11	.14*	.20**	.06	–.06
3. Sense of Calling	.34**	.23**	(.89)			.21**	.26**	.09	.61**	.29**	.29**	–.05
4. Spiritual	.02	–.02	.42**	(.86)		.02	.08	–.01	.31**	.15*	.59**	–.19**
5. Materialism	.19**	.06	.19**	.12*	(.90)	.07	.03	.46**	.05	–.06	–.0	.41**

Note. CDSE-SF refers to Career Decision Self-Efficacy, Short Form. Cronbach alpha coefficients for strivings appraisal scales are reported in parentheses on the diagonal.
*p<.05 **p<.01

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positive correlation with CDSE ($r = .28$), which was significantly larger than its correlations with extrinsic motivation ($r = .11$, $t[252] = 1.99$, $p < .05$), calling ($r = .14$, $t[252] = 1.97$, $p < .05$), religious commitment ($r = .06$, $t[252] = 2.62$, $p < .01$), and materialism ($r = -.06$, $t[252] = 3.95$, $p < .001$), but not meaning in life ($r = .20$, $t[252] = 1.21$, $p = .12$). This same pattern of significant and nonsignificant differences was found between the correlation of Self-Efficacy Strivings with intrinsic motivation and its correlations with the other criterion variables. In all, 15 of the 20 predictions regarding correlations of Outcome Expectations and Self-Efficacy Strivings scores with criterion variables were supported. Sense of Calling Strivings scores correlated strongly with calling ($r = .61$), moderately with meaning in life, religious commitment, intrinsic motivation, and CDSE (rs ranged from .21 to .29), and were uncorrelated with extrinsic work motivation and materialism scores. Spiritual Strivings scores correlated strongly with religious commitment ($r = .59$), moderately with calling ($r = .31$), weakly with meaning in life ($r = .15$), and were uncorrelated with intrinsic work motivation and negatively correlated with materialism scores ($r = -.19$). Finally, Materialism Strivings scores correlated robustly with materialism ($r = .41$) and extrinsic motivation ($r = .46$) and were uncorrelated with the other included variables. In sum, these patterns of correlations were largely consistent with expectations and provide evidence supportive of the convergent and discriminant validity of the strivings variables in the present study.

Discussion

The primary purpose of the present article was to illustrate the utility of the career development strivings strategy as a flexible and efficient approach to assessing nomothetic ratings of ideographic goals in the career decision-making process. Toward that end we demonstrated the reliability of career development striving appraisal ratings and showed predictable patterns of convergent and discriminant validity both among striving appraisal ratings and between those ratings and scores on measures of conceptually related and unrelated criterion variables.

As stated in the introduction, there are two principal advantages to the career development strivings method. The first is that it affords researchers the ability to investigate nomothetic motives for ideographic goals. This means that it is possible to identify broad, across-person individual differences that are related to specific, idiosyncratic goals that people report. As an

example, two people might have the respective goals of talking to an international development worker and gaining admission to medical school for training as a surgeon. On the face of it, these goals may have little in common and do not seem useful for understanding similarities and differences between the two people who have them beyond identifying a difference in occupational aspirations. However, by allowing these two people to rate their goals, we might find that both people view them as being inspired by a sense of calling. The person who aspires to be a surgeon might also rate this goal as being relevant to attaining status and material wealth. Furthermore, the first individual may express a high level of confidence that the stated goal can be attained and that doing so will be an important step in building a successful career, whereas the second person may express low confidence that the goal can be attained, even while perceiving the goal as helpful in achieving career success. Thus, with these two idiosyncratic goals as the point of reference, it is possible to identify the relative position of these individuals along individual differences dimensions to illustrate similarities or differences between them that are not otherwise apparent.

Two strivings appraisal scales were presented that measure outcome expectations and self-efficacy, variables often studied in career development research. However, research on these constructs has previously assessed them with respect to particular task domains specified by the researcher. In contrast, whereas the strivings approach allows researchers to assess participants' self-efficacy and outcome expectations with respect to their own self-generated career development tasks or goals. It is possible that individuals may rate their level of self-efficacy and outcome expectations for an externally suggested task domain differently than they would for their own idiosyncratic goals, even those residing in the same domain. We suspect that this may account for the surprisingly low correlation ($r = .28$) between the Self-Efficacy Striving appraisal scores and scores on career decision self-efficacy. These two variables likely share variance only to the extent that the CDSE-SF items, designed to sample the career decision self-efficacy domain, overlap with the idiosyncratic concerns that individuals report facing. For example, a participant may have a high level of confidence regarding CDSE-SF items such as "Prepare a good resume" and "Identify some reasonable alternatives if you are unable to get your first choice," yet simultaneously have a low degree of confidence in the ability to "Convince my significant other that my career is important enough for us to relocate" or "Get my screenplay noticed by Hollywood decision-makers." The latter two criteria may also

be more salient to this participant than the former two, thus illustrating that the strivings approach gives researchers the potential to test SCCT tenets using the task dimensions most central to participants in their own unique career decision-making and planning processes.

The second proposed advantage of the strivings approach is the enhanced flexibility and efficiency in understanding people's motives underlying the pursuit of their goals. The remaining three strivings appraisal scales in the present study represent motives (spiritual, calling-related, and materialistic) that are involved in the career development process of many individuals but for which research is sparse. We believe the strivings approach provides a straightforward, logical method of assessing such difficult-to-measure characteristics.

It is incumbent on those developing new assessment approaches to demonstrate suitable psychometric properties of the new measures. The results from this study provide compelling, but preliminary, evidence of the psychometric properties of the career development strivings approach and the specific appraisal dimensions assessed. The patterns of convergent and discriminant correlations generally were in expected directions for each of the striving appraisal scales with the possible exception of the Materialism Striving scale, for which evidence was mixed. Scores on this scale correlated in expected directions with Richins and Dawson's (1992) materialism scale and with extrinsic motivation, but were positively correlated with Calling Strivings and Spiritual Strivings scores, contrary to expectations. These latter correlations, however, were relatively weak (.19 and .12, respectively) and warrant further investigation and replication with additional participant samples. It is not fully clear from the present findings whether the Materialism strivings dimension was optimally operationalized; thus, further investigation might also focus on providing alternative descriptors of this dimension.

Limitations

The evidence presented in the present study falls short of a thorough psychometric evaluation of the strivings appraisal scales, which would include, for example, evidence of test-retest reliability, a multitrait–multimethod matrix, and correlations with relevant external criteria. An additional caveat pertains to the homogeneity of our sample, which is limited to college students and in which men and members of minority groups are underrepresented. Efforts to generalize our results should take this homogeneity into account. Finally, as

mentioned earlier, our approaches to assessing Outcome Expectations Strivings and Materialism Strivings may not conform to the most widely accepted understandings of these constructs.

Implications for Research and Practice

In the present study we assessed two strivings dimensions derived from SCCT (Self-efficacy and Outcome expectations) as well as three strivings dimensions that are under-researched in the career development literature. The most obvious implication of our demonstration of the strivings approach is that researchers are encouraged to adapt and test the approach to assess other motivational criteria underlying the idiosyncratic goals expressed by participants. Also, although not demonstrated in the present study, the strivings reported by participants can be assessed by external raters along a wide range of criteria. For example, independent raters could assess the extent to which the listed strivings represent approach or avoidance goals, involve content related to achievement, focus on goals for target outcomes as opposed to a focus on the process, are abstract versus specific, or any number of other factors. We urge researchers to consult the discussion of this option in Emmons (1999), which provides multiple examples of recommended criteria for assessing personal strivings using this approach. Finally, researchers should recognize the preliminary nature of the psychometric evidence in the present study and conduct a more thorough investigation of the reliability and validity of the approach.

Finally, we also expect that career counselors and guidance professionals may find benefit in using this measurement strategy with clients. For example, a counselor may ask clients to list their career development strivings early in the counseling process or even as a standard part of the intake paperwork, then have clients rate their strivings along dimensions that the counselor deems useful in the counseling process. This exercise may help clients clarify their goals and also may help them differentiate goals for which they have considerable confidence in their ability to attain from goals for which they may have little confidence, to cite one example. Given the evidence that written exercises involving goal setting activities has been found to be a "critical ingredient" that accounts for unique career intervention outcome variance (Brown & Ryan Krane, 2000), we believe a career development strivings exercise may serve as a powerful and efficacious intervention for clients with career concerns.

Appendix
Participant Instructions for the Career Development Strivings Assessment

Please now consider the activities you are currently engaging in to help you build a successful career. We are interested in the things that you are currently trying to do in your career development. We might call these types of activities "career development strivings." Here are some examples of career development strivings:

"I am trying to talk to my parents about what they think I'd be good at."
"I am trying to network with people in my chosen field."
"I am trying to avoid information that might cause me to doubt my choice."
"I am trying to take tests or assessments to help me understand myself."
"I am trying to get help from a career counselor."
"I am trying to avoid people who pressure me to enter a certain career."
"I am trying to pray about or reflect on what I should do with my career."
"I am trying to locate internships/jobs to apply for."

*Note that these strivings are phrased in terms of what people are currently "trying" to do, regardless of whether they are actually successful. For example, a person may be trying to get information about types of careers without being successful.
*These strivings may be fairly broad, such as "trying to get information about careers" or more specific, such as "trying to get information about summer internships."
*They can also be positive or negative. For example, you might be currently "trying to surf the Internet for career information," or you might be "trying to avoid people who pressure me to enter a certain career."

Please keep your attention focused on yourself when you consider your career development strivings. Do not mentally compare the things that you typically do with what other people do. Think of yourself and your purposes alone. Be as honest and as objective as possible. Do not simply give socially desirable strivings or strivings you think you "ought" to have. Please write down what you currently consider to be the five most important career development strivings in your life. As you do so, please do not include any identifying information.

(Goal 1) At this point in my career development,
   I am trying to . . . _____
(Goal 2) At this point in my career development,
   I am trying to . . . _____
(Goal 3) At this point in my career development,
   I am trying to . . . _____

(continued)

Appendix (continued)

(Goal 4) At this point in my career development,
   I am trying to . . . _____
(Goal 5) At this point in my career development,
   I am trying to . . . _____

Note. Instructions are adapted from, and closely follow, those used in Emmon's (1999) Personal Strivings measurement approach.

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