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Calling in Work

Secular or Sacred?

Michael F. Steger,[1] N. K. Pickering,[2] J. Y. Shin,[1] and B. J. Dik[1]

Abstract

Recent scholarship indicates that people who view their work as a calling are more satisfied with their work and their lives. Historically, calling has been regarded as a religious experience, although modern researchers frequently have adopted a more expansive and secular conceptualization of calling, emphasizing meaning and personal fulfillment in work. The assumption that calling can be easily secularized and applied has not been tested. Therefore, we tested whether calling was related to psychological adjustment and positive work attitudes of both highly religious and less religious college students ($N = 242$). We also tested whether these positive relations were mediated by people's intrinsic religiousness or by a broader, secular construct, meaning in life. Moderation-mediation analyses supported views of calling centering on people's experience of meaning in their work rather than more constrained religious views. Implications for future research and practical applications of calling to positive work attitudes are discussed.

People's work experiences wield substantial influence over their happiness and their functioning in other life domains. In many cases, it is the attitude with which people approach their work rather than more objective job characteristics that are most related to career satisfaction (Davidson & Caddell, 1994; Hall & Chandler, 2005; Hughes, 1958). Among many such attitudes toward work, the notion of calling has shown promise as a predictor of better individual and organizational functioning (for reviews, see Dik & Duffy, in press; Steger & Dik, in press; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). At a fundamental level, scholarly work on calling expresses the notion that work can be more than simply a means of gaining the financial resources necessary to clothe, feed, and house oneself and one's dependents. Historically, calling has been understood from a religious perspective, referring to the idea that God or a Higher Power "calls" people to use their talents in service of others through their work lives (Hardy, 1990). More recently, scholars have loosened this definition, defining calling in terms of more expansive and secularized notions like finding

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personal fulfillment in one's work and perceiving work as meaningful and purposeful (e.g., Baumeister, 1991; Hall & Chandler, 2005). The purpose of the current study was to examine whether this recent conceptual shift reflects how people experience calling in their careers.

Because research is proceeding rapidly to delineate the apparent benefits of orienting to one's career as a calling, it is important to examine some of the fundamental assumptions driving this growing research area. One assumption is that the religious idea of calling based on being called by a Higher Power can be extended to include the more secular idea of calling based on finding personally fulfilling and meaningful work. Essentially, modern scholars have assumed that this erstwhile religious variable is beneficial among religious and nonreligious workers alike. Previous studies have consistently supported the link between having a sense of calling and psychological adjustment, represented by higher levels of work satisfaction, life satisfaction, and self-concept clarity, and lower levels of depression (Davidson & Caddell, 1994; Wrzesniewski et al., 1997; Treadgold, 1999). Similar links also have been established between calling and positive work attitudes, indicated by greater commitment to one's profession, greater enthusiasm and commitment toward one's career, and acceptance of duties not necessarily included in a job description (Serow, Eaker, & Ciechalski, 1992; Serow, 1994). It appears fairly clear that people who report a sense of calling in their lives experience it in a positive, beneficial manner.

As compelling research findings accumulate, it becomes increasingly likely that practitioners design and implement interventions intended to enhance people's sense of calling in their careers. For example, interventions might frame the career decision-making process in terms of discerning a calling, encourage an integration of religious or spiritual worldview assumptions with one's career development, draw connections between meaning in life and meaning in work, and promote prosocial considerations (Dik, Duffy, & Eldridge, in press). Although the results published thus far are encouraging (e.g., Dik & Steger, 2008), interventions that are conducted without an eye toward whether calling really applies to everyone equally may encounter—or create—difficulties for clients. On one hand, if calling inherently carries religious connotations consistent with its historical heritage, promoting calling among nonreligious clients could cause a conflict in values between clients and the counseling approach. In this case, clients might feel that a religious perspective is imposed on them by counselors. On the other hand, many psychologists feel that it is not appropriate to discuss religious topics in therapy (Bergin & Jensen, 1990), and it is possible that there is an ambient bias against religious content that has helped popularize a modern, secular view on calling. If calling is experienced by clients as a religious phenomenon or is only experienced by religious clients, then this secular approach to calling could create a mismatch, leaving more religious clients feeling underserved, and leading to missed opportunities to benefit their career development. By better understanding how calling is experienced by people in their lives, the potential for mismatches between historical, religious notions of calling and more recent, secularized notions of calling can be appraised.

Two primary strategies appear useful for testing whether there is a discrepancy between modern implementations of calling and people's actual experience of calling. The first strategy seeks to examine potential intermediary means by which approaching one's career as a calling translates to healthier psychological and positive work attitudes. We proposed two competing potential mediators, one based on the historical development of the construct of calling (intrinsic religiousness) and the other based on broader and more recent notions of the construct (meaning in life). If religiousness, and not meaning in life, mediate relations between calling and psychological and career variables, it would suggest that calling is typically experienced as a religious phenomenon. If the reverse is true, it would suggest that calling is typically experienced as a more inclusive phenomenon. The second strategy seeks to examine if religious and nonreligious people report similar ''benefits'' of calling vis-à-vis whether religious and nonreligious people demonstrate similar relations between having a calling orientation and well-being and career outcomes. If a stronger

relation between calling and psychological and career variables is present among intrinsically religious people, it would suggest that calling is more of a religious experience. In the current study, we examined these hypotheses simultaneously, using a mediated-moderation analytic framework (Edwards & Lambert, 2007). In following sections, we will consider historical, religious views of calling, then consider more recent, secularized views of calling, and finally describe an investigation into how calling is experienced among a sample of college students.

Calling in a Religious Context (Work as Religion)

The concept of calling originally emerged in a religious context, implying that people were called by God to engage in particular religiously affiliated occupations. Later, the concept of calling was broadened to include any "honest" line of work, as long as its pursuit was motivated by God's summons with the intention of serving a greater purpose and the common good (see Dik & Duffy, in press; Hardy, 1990; Weber, 1958). The consistent distinguishing feature of this religious perspective on calling was the sense that the "call" came from a transcendent source, specifically the voice of God, or the experience of a Higher Power or Divinity. In this tradition, some religious or spiritual entity was the source of the calling; and people served a purpose and the greater good by heeding the call. As such, this sense of calling suggests that one likely aspect of calling is an appreciation of religious experience in ways that are relevant to work. Much of the theoretical work on calling has reflected this religious heritage (e.g., Dik & Duffy, in press), and qualitative research with college students suggests that religion and the concept of a transcendent summons remain relevant considerations in how callings are conceptualized (Constantine, Miville, Warren, Gainor, & Lewis-Coles, 2006; Hunter, Dik, & Banning, under review).

In line with views of calling as a divine inspiration to participate in certain work, people's spiritual and religious attitudes appear related to how they view their work lives. Intrinsic religiosity and spiritual awareness have been associated with career decision self-efficacy in college students (Duffy & Blustein, 2005) and with job satisfaction in working adults (Robert, Young, & Kelly, 2006). People for whom spirituality is more salient also express a greater desire to serve others through work (Lips-Wiersma, 2002). In addition, college students who endorse spiritual and religious beliefs expressed that they draw from this source in coping with career-related struggles and in the establishment of their work-related values (Constantine et al., 2006; Royce-Davis & Stewart, 2000). Thus, there is both theoretical and empirical support for drawing connections between religious experience and career considerations. In the current study, we examined intrinsic religiousness (people's genuine religious beliefs and participation in religious practice for the sake of the religious experience itself, not for any secondary gain) to assess this religious experience. We examined whether intrinsic religiousness mediated links between having a calling and positive psychological and career attitudes. If intrinsic religiousness does mediate this link, it would suggest that calling is beneficial to the degree that it increases people's religiousness. This finding would support historical views that calling is a religious experience of work. Intrinsic religiousness seems like a viable mediating mechanism because of previously established links with psychological adjustment (e.g., Steger & Frazier, 2005) and positive work attitudes (e.g., Duffy & Blustein, 2005).

Calling in a Secular Context (Work as Meaning)

As noted previously, the emphasis on calling has shifted recently from religious means and ends to a focus on personal fulfillment and meaning. It is not clear whether this change reflects the perspective of scholars or a pervasive cultural shift reflected among emerging generations of workers. This broader, more secularized concept of calling is commonly viewed as an important factor of people's work experiences, regardless of their religious heritage (e.g., Baumeister, 1991; Bellah, Madsen,

Sullivan, Swidler, & Tipton, 1985; Hall & Chandler, 2005). This perspective recognizes people's efforts to endow their work with an overarching sense of meaning and purpose and a desire for their work to contribute to the greater good (Dik & Duffy, in press; Steger & Dik, in press).

In line with views of calling as a source of general meaning, many people appear to believe that work *should* provide meaning (Ryff & Singer, 1998; Šverko & Vizek-Vidović, 1995) and that finding meaning in one's work is as important as salary or job security (O'Brien, 1992). People describe a wide variety of specific meanings that their work holds for them (Colby, Sippola, & Phelps, 2001; Steger & Dik, in press; Wrzesniewski, 2003), and, regardless of the specific occupational title, many people appear to approach their careers as a source of valued meaning (e.g., Isaksen, 2000; Wrzesniewski et al., 1997). People experience less boredom and negative work attitudes when they do pursue meaning in work (Isakson, 2000). From this perspective, meaningful work that benefits local and global communities is not solely a religious concern (Steger & Dik, in press). Because most of the relevant empirical literature, and indeed most trade books on calling-related topics (e.g., Levoy, 1997), appear to focus on the meaning component of this secular view on calling, rather than on the desire to work for the greater good, we examined whether meaning in life (people's subjective judgment that their lives have purpose and meaning) mediated links between having a calling and positive psychological and career attitudes. If meaning in life does mediate this link, it would suggest that calling is beneficial to the degree that it increases people's sense of meaning in life. This finding would support more recent secularized views that calling is an existential experience of work. Meaning in life appears to be a suitable mediator because of previously established links with psychological adjustment (e.g., Steger, Frazier, Oishi, & Kaler, 2006) and positive work attitudes (e.g., Bonebright, Clay, & Ankenmann, 2000), including among college students (Tryon & Radzin, 1972).

The Present Study

In the previous sections, we considered one way of conceptualizing relatively narrow, religious versus relatively broad, secularized views of calling, namely by determining the extent to which religious or existential variables mediate the relation between calling and psychological and positive work attitudes. It is also informative to ask whether calling is equally associated with positive psychological and positive work attitudes for everyone. If calling is primarily a religious experience, it may only be related to adjustment for people who are highly religious or for whom religion is very important. In contrast, if calling is a broader experience, open to everyone, then calling should be related to adjustment among both highly religious and less religious people. We used a brief measure of religious commitment to divide a sample of undergraduates into highly religious and less religious subsamples and then assessed the relations of calling with psychological and positive work attitudes.

Additionally, although the view of calling as a secular experience of meaningful work has perhaps become more prevalent, it is empirically unknown whether people experience this nonreligious sort of calling. In addition, little research has explored the role of religious beliefs in the experience of calling. This study sought to examine whether the network of positive associations that have been reported between calling and psychological and positive work attitudes can be explained by either one's intrinsic religiosity or one's sense of meaning and purpose in life. Thus, we first tested a mediation model with two competing potential mediators: intrinsic religiosity and meaning in life. We created a latent variable to represent the multidimensional nature of psychological adjustment (i.e., satisfaction with life, positive affect (PA), and existential well-being [EWB]). Likewise, we created a latent variable to cover a broad range of indicators of positive work attitudes that would be appropriate for a precareer, undergraduate sample (i.e., work enjoyment, desiring challenge at work, and career decidedness). Following the analysis of mediation, we addressed the question of whether the

pattern of relations between calling and adjustment differed according to people's degree of religious devotion using multigroups modeling.

Thus, the current study offers two different, yet complimentary, approaches to testing whether modern assumptions that calling attitudes toward work comprise a primarily secular experience. In the process, the current study adds to the growing literature documenting the potentially beneficial role that could be played by approaching work as a calling.

Method

Participants

A sample of 295 introductory psychology students were recruited from a large public university (total M age $= 19.7$, $SD = 2.8$; 73% female; 85% European American, 10% Asian American, and the remaining 4% African American, African, Asian/Pacific Islander, Hispanic, Middle Eastern, or "other").

Procedures

Participants contacted researchers by e-mail in response to a posted description of the study. An e-mail response was sent to participants with a URL/Internet address for consent materials and questionnaires. To reduce participant burden, the study implemented the short forms of many measures.

Instruments

Calling. The Brief Calling Scale (BCS; Dik, Sargent, & Steger, in press) is a four-item scale with two subscales that measure presence of calling (Calling) and seeking a calling. We only used the two-item Calling subscale in the current study (i.e., "I have a calling to a particular kind of work;" "I have a good understanding of my calling as it applies to my career"; $M = 6.1$, $SD = 2.1$). Participants were provided with the following description of calling: " . . . Broadly speaking, a "calling" in the context of work refers to a person's belief that she or he is called upon (e.g., by God, by the needs of society, by a person's own inner potential, etc.) to do a particular kind of work. Although at one time most people thought of a calling as relevant only for overtly religious careers, the concept is frequently understood today to apply to virtually any area of work . . . ." Following this description, they rated the items from 1 (*not at all true of me*) to 5 (*totally true of me*). Higher scores indicate greater endorsement of a calling approach to work and career. The convergent validity of the Calling subscale has been demonstrated in the form of positive correlations with measures of career development among college students (e.g., decidedness, career choice comfort; Dik et al., in press; Dik & Steger, 2008; Duffy & Sedlacek, 2007). As in Duffy and Sedlack (2007), the two Calling items were strongly correlated ($r = .76$).

Religious commitment. The Religious Commitment Inventory (RCI-10; Worthington et al., 2003) is a 10-item scale that measures religious commitment. The RCI-10 consists of 10 items that load onto two factors; six-item Intrapersonal Religious Commitment and four-item Interpersonal Religious Commitment. Because the two factors are highly correlated ($r = .72$, .86), suggesting that a one-factor structure is most parsimonious (Worthington et al., 2003), we used the full scale (e.g., "My religious beliefs lie behind my whole approach to life," "I enjoy working in the activities of my religious organization"; $M = 22.9$, $SD = 10.1$). Items are rated from 1 (*not at all true of me*) to 5 (*totally true of me*). Higher scores indicate greater religious commitment. Scores were reliable in the current sample ($\alpha = .87$).

Intrinsic religiousness. The Intrinsic/Extrinsic Religiosity (I/E-R) Scale (Gorsuch & McPherson, 1989) is a 14-item measure containing that measures intrinsic religiosity, extrinsic-social uses of religion, and extrinsic-personal uses of religion. We used the eight-item Intrinsic scale (e.g., "My whole approach to life is based on my religion"; $M = 24.7$, $SD = 5.8$) in the current study. Items are rated from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate greater personal commitment and involvement with religion. Previous research establishes acceptable reliability and discriminate validity for the I/E-R (Gorsuch & McPherson, 1989). Scores were reliable in the current sample ($\alpha = .76$).

Meaning in life. The Meaning in Life Questionnaire (MLQ; Steger et al., 2006) is a 10-item measure of people's search for, and experience of, meaning and purpose in life. We used a short form of the Presence of Meaning subscale in the current study (Dik & Steger, 2008). The short form was comprised of the three highest loading presence of meaning items from a separate dataset (e.g., "I have a good sense of what makes my life meaningful," "My life has no clear purpose"; $M = 14.3$, $SD = 3.4$). Items are rated from 1 (*absolutely untrue*) to 7 (*absolutely true*). Higher scores indicate greater meaning and purpose in life. Research supports the reliability, stability, structural validity, convergent, and discriminant validity of MLQ scores (Steger et al., 2006; Steger & Kashdan, 2007; Steger, Kashdan, Sullivan, & Lorentz, 2008). Scores were reliable in the current sample ($\alpha = .81$).

Psychological adjustment

Life satisfaction. The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larson, & Griffin, 1985) is a five-item measure assessing the cognitive appraisal of well-being (e.g., "In most ways my life is close to the ideal"; $M = 25.9$, $SD = 5.4$). Items are rated from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater satisfaction with life. Previous studies have confirmed supported reliability and validity (for a review, see Pavot & Diener, 1993). Scores were reliable in the current sample ($\alpha = .87$).

Existential well-being. The Expressions of Spirituality Scale (ESS; MacDonald, 2000) is a 30-item measure of people's experiences of the broad domain of spirituality through five subdimensions. We used the six-item EWB subscale to indicate participants' level of spiritual adjustment and well-being (e.g., "My life is often troublesome"; $M = 24.9$, $SD = 4.4$). Items are rated on a 5-point response scale from 0 (*Strongly Disagree*) to 4 (*Strongly Agree*). Previous research has demonstrated the reliability and factor structure of the ESS (MacDonald, 2000). Scores were reliable in the current sample ($\alpha = .86$)

Positive affect. The Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) is a widely used 20-item measure of positive and negative emotions. We used the 10-item PA subscale to indicate how much participants have experienced pleasant emotions (e.g., interested, active, proud; $M = 26.6$, $SD = 5.6$) over the past 2 weeks. Items are rated on a five-point Likert scale from 1 (*very slightly or not at all*) to 5 (*extremely*). Higher scores indicate more frequent experiences of PA. Previous research has established good internal consistency, test-retest stability validity PA (Watson et al., 1988). Scores were reliable in the current sample ($\alpha = .83$).

Positive Work Attitudes

Work challenge and work enjoyment. The Work Preference Inventory (Amabile, Hill, Hennessey, & Tighe, 1994) is a 30-item measure intended to assess self-perceptions in regard to individuals' motivation for their choice of work. We used the seven-item Challenge subscale (e.g., "I want my work

Table 1. Descriptive Statistics and Correlations Among Measures

	M	SD	1	2	3	4	5	6	7	8	9
1. Religious commitment	22.9	10.1									
2. Calling	6.1	2.1	**.24**								
3. Intrinsic religiousness	24.7	5.8	**.82**	**.22**							
4. Meaning in life	19.8	4.4	**.31**	**.42**	**.28**						
5. Life satisfaction	25.9	5.4	.08	**.23**	.08	**.52**					
6. Existential well-being	24.9	4.4	−.08	.06	−.04	**.38**	**.51**				
7. Positive affect	26.6	5.6	**.29**	**.30**	.19	**.43**	**.43**	**.25**			
8. Work challenge	18.4	3.3	.08	.19	.02	.17	**.20**	.18	**.29**		
9. Work enjoyment	23.8	3.4	.09	**.24**	.06	**.21**	**.21**	.12	**.27**	**.48**	
10. Career decidedness	12.6	3.4	.05	**.36**	.10	**.34**	**.24**	.06	.10	.10	.18

Notes. $N = 242$. *r*'s > .12 are significant at the $p < .05$ level, coefficients in boldface are significant at the $p < .001$ level.

to provide me with opportunities for increasing my knowledge and skills''; $M = 18.4$, $SD = 3.3$) and the eight-item Work Enjoyment subscale (e.g., ''It is important for me to be able to do what I most enjoy''; $M = 23.8$, $SD = 3.4$) to assess positive, adaptive attitudes toward work. Challenge and Work Enjoyment are considered beneficial attitudes. Items are rated from 1 (never or almost never true of you) to 4 (always or almost always true of you). Higher scores indicate greater desire for challenge and work enjoyment, respectively. Research has supported the reliability and validity of the WPI (Amabile et al., 1994). Scores were only marginally reliable in the current sample ($\alpha = .70$ for both subscales).

Career decidedness. The Career Decision Profile (CDP; Jones, 1989) is a 16-item measure of a respondent's status of a career decision. We used the two-item Decidedness scale to assess the degree to which participants felt certain about their career choice (e.g., ''I have decided on the occupation I want to enter; for example, electrical engineer, nurse, or cook'')''; $M = 12.6$, $SD = 3.4$). Items are rated from 1 (*Strongly Disagree*) to 8 (*Strongly Agree*). The CDP has demonstrated reliability and convergent validity (Jones, 1989). Higher scores indicate a greater degree of certainty regarding career choice. Scores were reliable in the current sample ($\alpha = .84$; item intercorrelation = .74).

Results

Data Analytic Plan

Descriptive statistics and correlations between the measures used in this study are provided in Table 1.

We used the structural equation modeling program AMOS 6 (Arbuckle, 2005) to examine (a) the degree to which meaning in life or intrinsic religiousness mediated relations between calling work orientations and both psychological adjustment (PSY) and positive work attitudes (WORK), and (b) the degree to which level of religious commitment moderated these relations. This was accomplished using a multigroups application of structural equation modeling, with those scoring above the median on the RCI serving as the high religious commitment group, and those scoring below the median on the RCI serving as the low religious commitment group. In this approach, mediation is indicated by the presence of significant indirect paths from calling to PSY or WORK when the mediators (meaning in life and intrinsic religiousness) have been added to the model (Edwards & Lambert, 2007). As a first step in these analyses, latent variables for PSY and WORK were created using three indicators (see Methods) for each variable. This helps ensure that our PSY and WORK

variables are fairly broad and representative. To examine whether religious commitment moderated the relations among calling and psychological and positive work attitudes, we tested whether the fit of the mediation model significantly worsened when we constrained successive parameters estimating the relations between variables to be equal across levels of religious commitment. Thus, in each section that follows, we report the fit of the PSY and WORK measurement models, whether significant indirect effects suggest mediation is occurring, and whether any direct paths in the model differ between highly religiously committed people and less religiously committed people.

Psychological Adjustment (PSY)

Measurement model. The measurement model for PSY consisted of life satisfaction, PA, and existential well-being. Together, these three indicators index people's appreciation for their lives, propensity to experience positive emotions, and freedom from emotional and psychological distress. The best-fitting model allowed the residual estimate for EWB to correlate with the residual estimates for both life satisfaction and PA. Some of the fit indices (e.g., CFI, GFI) reflected a good fit, whereas others (e.g., Tucker-Lewis Index [TLI], Root Mean Standard Error of Approximation [RMSEA]) indicated that fit was poor (χ^2 [$df = 1$] = 10.46, $p < .001$; CFI = .92, GFI = 97, TLI = .76, SRMR = .09, RMSEA = .20). Taken as a whole (e.g., Tabachnick & Fidell, 2001), the fit appeared to be adequate for the purposes of testing whether path strength differed between highly religious and less religious participants.

Mediation. Direct paths were allowed from calling, intrinsic religiousness, and presence of meaning to WORK. Models were estimated simultaneously for both high religious commitment and low religious commitment participants. Thus, each group could have unique path estimates. Mediation was estimated by the significance of any indirect paths from calling to the PSY latent factor (Edwards & Lambert, 2007).

Direct paths between calling and meaning in life and between meaning in life and PSY were significant for both groups; the path between calling and intrinsic religiousness was significant only for the high religious commitment group (see Table 2).

There was evidence of an indirect path between calling and well-being for both high religious commitment ($\beta = .16$, $p < .10$) and low religious commitment groups ($\beta = .28$, $p < .01$). Because there was no significant direct path from intrinsic religiousness to well-being for either group, this indirect relation must be mediated by meaning in life. Thus, meaning in life appears to significantly, and fully, mediate the relation between calling and well-being, explaining some portion of why people who have a calling orientation to work appear to report greater well-being.

Moderation. To test whether level of religious commitment moderated the relations among calling, intrinsic religiousness, meaning in life, and well-being, we constrained successive path parameters to be equal across high and low religious commitment groups (Byrne, Shavelson, & Muthén, 1989; Cheung & Rensvold, 2002). Significant differences in path coefficients create poorer fitting models. In the case of nested models, a significant single-degree of freedom χ^2 test demonstrates significantly poorer fit (e.g., first, the path between Calling and PSY was constrained and the model fit was compared with the free model; next, the path between Calling and Intrinsic Religiousness was constrained and compared with the previous model, and so on).

In the analyses conducted predicting PSY, only one constraint of parameters significantly worsened model fit. Constraining the path between calling and intrinsic religiousness to be equal significantly worsened the model (χ^2 ($df = 1$) = 5.60, $p < .01$), meaning that there was a stronger positive relation between calling and internally motivated orientations to religion among highly religiously committed participants.

Table 2. Direct and Indirect (Mediated) Paths Among Calling, Intrinsic Religiousness, Presence of Meaning, and Well-Being and Positive Work Attitudes

	High religious commitment	Low religious commitment	Significance of difference
Calling to psychological adjustment (direct)	.13	−.06	NS
Calling to psychological adjustment (indirect)	.16[+]	.28[**]	NS
Calling to intrinsic religiousness	.29[**]	−.02	.01
Calling to presence of meaning	.33[***]	.49[***]	NS
Intrinsic religiousness to psychological adjustment	.03	.05	NS
Presence of meaning to psychological adjustment	.47[***]	.58[***]	NS
Calling to positive work attitudes (direct)	.42[*]	.35[*]	NS
Calling to positive work attitudes (indirect)	.14	.10	NS
Calling to intrinsic religiousness	.29[**]	−.02	.01
Calling to presence of meaning	.33[***]	.49[***]	NS
Intrinsic religiousness to positive work attitudes	−.13	−.05	NS
Presence of meaning to positive work attitudes	.56[***]	.19[*]	.001

Notes. $N = 295$.
[+] $p < .10$. [*] $p < .05$. [**] $p < .005$. [***] $p < .001$.

Positive Work Attitudes (WORK)

Measurement model. The measurement model for WORK consisted of work challenge, work enjoyment, and career decisiveness. Together, these three indicators index people's genuine commitment to an enjoyable career path. All of the fit indices suggested good-to-very-good fit (χ^2 ($df = 1$) = 5.37, $p < .05$; CFI = .99, GFI = .98, TLI = .92, SRMR = .08, RMSEA = .06).

Mediation. As in the test of the previous model, direct paths were allowed from calling, intrinsic religiousness, and presence of meaning to WORK. Direct paths between calling and WORK, calling and meaning in life, and meaning in life and WORK were significant for both groups; as in the analysis for PSY, the path between calling and intrinsic religiousness was significant only for the high religious commitment group (see Table 2). In addition, the indirect path between calling and PWA was not significant for either group. Therefore, neither internal religiousness nor meaning in life mediated the relation between calling and WORK.

Moderation. We used the same approach toward moderation as in the analyses concerning PSY. As in that set of analyses, constraining the path from calling to intrinsic religiousness significantly worsened the fit of the model (χ^2 ($df = 1$) = 5.59, $p < .01$). This path was significant and positive only among highly religiously committed participants (see Table 2).

Unlike the analyses for PSY, highly religiously committed participants reported a significantly stronger positive path between presence of meaning and WORK (χ^2 ($df = 1$) = 11.31, $p < .001$).

Taken as a whole, the findings from the model predicting WORK suggest that calling is related to positive work attitudes independent of either intrinsic religiousness or meaning in life, but that calling is also related to positive work attitudes because it is related to meaning in life, which is in turn related to positive work attitudes, particularly for highly religiously committed participants.

Discussion

Research is quickly accumulating, suggesting that many people want to experience a sense of calling in their work. This research also is beginning to show that such people appear to value their work

more and to work better with others in their organizations. Understandably, the appeal of this research as an inspiration for practical career interventions is strong. Conceptually, the foundation and emphasis of this research has undergone a recent shift from predominantly religious understandings of calling to encompass more secularized notions in which personal fulfillment and meaning are the foci. In the current study, we have attempted to test whether the broader construal of calling matches the way in which both religious and nonreligious people experience calling. In short, we sought to provide the first indications of whether calling is secular or sacred. We tested this idea in two ways; we examined whether broader and more secular (meaning in life) or sacred (intrinsic religiousness) variables mediated the relations between calling and psychological and positive work attitudes, and we examined whether the links between calling and adjustment were equally strong for more religiously committed people compared to less religiously committed people. The results of our analyses support recent efforts to conceptualize calling broadly in ways that are relevant for both religious and nonreligious individuals (e.g., Wrzesniewski et al., 1997) and support the modern reframing of calling as an orientation to work that prioritizes meaning as a core experience and component of having a calling in work. This does not discount the possibility that more religious interpretations of calling may be more appropriate or effective with religious clients, but it does highlight the potential importance of meaning in people's careers. After all, meaning in many people's lives may be inseparable from their religious beliefs, traditions, and experiences.

The current study provides three novel contributions to the research literature on calling. First, this study provides the first evidence that calling is related to several of the variables we used in our psychological adjustment and positive work attitudes factors. For example, we are unaware of any research that has linked calling with greater frequency of PA and greater existential well-being. We think it is noteworthy that people who report feeling that their careers provide them with a sense of calling also desire both more challenge and more enjoyment in their work (see also Duffy & Sedlacek, 2007) and also appear more focused and decisive in their career decision making. These findings are very much in line with the idea at the heart of calling theory: people who approach their work as a calling have a career that engages them at a deep level and provides them with a highly valued sense of contribution and worth in their work lives.

In addition to adding to the growing body of research linking calling orientations to work with better psychological and positive work attitudes, the current study suggests one mediator of some of these links. Meaning in life appeared to be a significant mediator of the relation between calling and psychological adjustment and appeared to serve as a supplemental link from greater calling to greater meaning to greater positive work attitudes. One of the central pillars of modern calling theory is that work can provide people both with meaningful work experiences and also with a route to discovering and experiencing greater purpose and meaning in their lives as a whole (e.g., Dik & Duffy, in press; Hall & Chandler, 2005; Lips-Wiersma, 2002; Steger & Dik, in press; Wrzesniewski, 2003). The current results provide the most direct confirmation of these ideas and help justify the position of meaning at the heart of calling and other conceptualizations of rewarding work experiences (e.g., Goffee & Jones, 2006). However, the relations among different aspects of calling and meaning in life may be complex. For example, recent research suggests that finding a calling in work appears to satisfy people's search for meaning in life, with a greater sense of meaning in life as one potential benefit (Steger & Dik, 2009). Future research should use longitudinal and intervention methods to further explore the idea that meaning in life explains much of the positive psychological benefits of having a calling and augments the positive work attitudes associated with calling.

Finally, the current study demonstrated that calling was equally related to meaning in life and positive work attitudes, as well as related to psychological adjustment (through the mediating path of meaning in life) among both highly religiously committed people and those who were less religiously committed. We are not aware of any previous research that has examined explicitly the role of religious orientations in people's experiences of calling. This is surprising, given the heavy

religious influence on how calling has been conceived and communicated. Our results suggest that different people may gravitate to different aspects of the main components of calling. For example, among highly religiously committed people, calling was related to intrinsic religiousness. Perhaps among highly altruistic people, the opportunity to work toward the greater good would be an important correlate. One of the limitations of the current study was that the brief measure of calling we used gave participants a thorough description of calling but did not provide an opportunity for participants to selectively endorse which aspects of calling (transcendent summons, meaning and purpose, serving the greater good) they felt were present in their career plans. Using a multidimensional measure of calling would allow future research to begin to examine whether some degree of pairing occurs; do people who have a mystical or charismatic religious life more highly prize the transcendent summons component of calling or do allocentric or altruistic people value serving the greater good more? One thing that seems fairly clear from the current findings, however, is that the role of meaning and purpose appears to be broadly accessible and applicable and not confined solely to religious individuals. The idea of work as a form of meaning creation warrants dedicated empirical inquiry.

Implications for Practice

It is incumbent upon researchers and practitioners alike to test their assumptions about which variables play a role in people's ultimate adjustment. To some degree, recent work on calling has provided an example of a failure to check assumptions. Research and practice recommendations have been advanced in accordance with the assumption that the religiously inspired and subsequently secularized concept of calling applies equally well to more and less religious people. Multiculturally informed practice emphasizes the importance of checking assumptions such as these and in light of recent arguments that religious variables are closely tied to cultural and ethnic factors (Blaine & Crocker, 1995; Fouad & Brown, 2000), prudence mandates some caution in either casually importing religious ideas into secular practice, or in jettisoning potentially useful religious content from interactions with religious clients. In this instance, our research provides some support for the assumption that a core of meaningfulness as a basis of calling can be effectively applied to religious and nonreligious people alike. Unfortunately, the current study, like nearly all the research on calling, is a correlational study. Thus, recommendations of specific interventions or calling-related techniques must remain tentative. However, it seems defensible to recommend that counselors and organizational specialists assess clients' interests in approaching work as a calling to tailor services to their needs (see also Dik, Duffy, & Eldridge, in press). In addition, some guidelines have been proposed that can be individually tailored to dovetail with either secular or sacred orientations to help younger adults cultivate meaning in their work (Kosine, Steger, & Duncan, 2008). These guidelines focus on the development of identity, self-efficacy, metacognitive abilities, an appreciation of one's culture, and a value of serving a greater good.

Although calling appears to play a similar role among both highly religious and less religious people, it may be useful to couch discussions with clients in different terms depending on whether they are religious. For example, a number of theoretical models (e.g., Bloch, 2005; Brewer, 2001; Hansen, 1997; Miller-Tiedeman, 1994) commonly emphasize that spiritually or religiously minded individuals may make better use of religious and spiritual concepts in their career-related decision making (Duffy, 2006; Dik et al., in press). Furthermore, the current study was limited in that we used an undergraduate sample and a median split technique for assigning people to highly religious and less religious groups. It is not clear that these findings would generalize to working adults, and it is important to extend this line of inquiry to working samples. Of particular interest would be studies comparing the role of calling among adults working in religious careers versus those working in more typical secular careers. Alternatively, future

research could use church attendance or involvement in religious communities or activities as an indicator of religiousness.

Conclusions

Interest in the venerable notion of calling seems to be growing, and research into the topic has consistently shown that people who approach work as a calling also report more positive psychological and positive work attitudes. The current study contributes to this work and helps resolve an untested assumption that calling is relevant to both religious and nonreligious people. At the core of the broader, more secularized framings of calling is the idea that work can be both meaningful and provide a broader sense of meaning in a person's life. Our results also suggest that meaning may be an important part of calling. This fits with other findings. For example, a large majority of people whose employment involved highly repetitive tasks tried to construct meaning in their work (Isaksen, 2000). Many people express the belief that work should provide meaning (Šverko & Vizek-Vidović, 1995) and agree that finding meaning in one's work is as important as level of pay and job security (Hall & Chandler, 2005; O'Brien, 1992). Given the fact that several lines of research conducted in diverse samples using different methods all converge on the importance of meaning in work, it seems clear that more attention is needed to understand the factors that help create this sense of meaning and to continue to inquire about the role that work as meaning plays in cultivating and sustaining people in their callings.

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