Article

Career Calling in India and the United States: A Cross-Cultural Measurement Study

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Abstract
The present study examined the cross-cultural validity of instruments used to assess the experience of searching for, having, and living out a calling. Using a sample of 336 Americans and 327 Indians, we used structural equation modeling to assess measurement invariance of three common scales used to measure calling: the Calling and Vocation Questionnaire (CVQ), the Brief Calling Scale, and the Living Calling Scale. Results showed partial measurement equivalence for the presence scale of the CVQ, indicating that it may be a valid measurement of within-group differences among Indian participants. Analyses on remaining scales showed borderline support for equivalence of factor structure and failed to demonstrate validity of cross-cultural comparisons. Implications for researchers and clinical practitioners are discussed.

Keywords
calling, cross cultural, meaningful work, career development, measurement invariance

Over the last decade, scholars within vocational, counseling, and industrial/organizational psychology have become increasingly interested in studying careers motivated by passion, intrinsic reward, meaningfulness, and helping others. One construct that encapsulates these types of careers is a calling. Although researchers debate the definition of a calling, a recent review by Duffy and Dik (2013) consolidated these definitions and described a calling as work that is personally meaningful and that benefits others, often arising from an internal or external summons. Previous research has shown that a calling can be experienced across fields, socioeconomic backgrounds, genders, education levels, and ethnicities (Duffy, Allan, Autin, & Bott, 2013; Duffy & Autin, 2013; Duffy, Bott, Allan, & Autin, 2015; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Thus, research points to calling as a construct that may be relevant across a variety of populations. Few studies, however, have examined the cross-cultural validity of the construct particularly in non-Western

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nations. In the current article, we aim to address this gap in the literature by assessing the validity of instruments used to assess calling with participants from the United States and India.

Career Calling

In their review of the calling literature, Dik and Duffy (2009) examined the history of the construct as it applied to work. Although ''calling'' originally referred religious careers, the meaning of the word began to shift in the 16th century to include any vocation that held spiritual significance to the worker. This shift was strongly influenced by Protestant reformers such as Martin Luther and John Calvin who sought to fight back against the idea that spiritual vocations were reserved for clergy people and argued that even earthly work could hold spiritual meaning. In the following centuries, Protestant writings on calling proliferated and the construct continued to be a prominent aspect of Protestantism of the 17th and 18th centuries (Hardy, 1990). Therefore, this construct has deep roots in Western thought and specifically Protestant religious convictions.

Throughout the centuries, the meaning of calling has continued to evolve. However, the construct has only recently attracted the attention of the psychological community with a surge of theoretical and empirical articles published from the early 1990s to the present (e.g., Bellman, 1990; Duffy & Dik, 2013; Hardy, 1990; Serow, Eaker, & Ciechalski, 1992; Wrzesniewski et al., 1997). A major contribution of the last decade is the finding that calling has extended beyond its purely Protestant context. Although religious conceptions of a transcendent ''caller'' are still pertinent to the study of calling in certain populations (e.g., Christians), the construct has broadened even further and is now used in secular contexts (Duffy, Allan, Bott, & Dik, 2014; Dik & Duffy, 2009). Surprisingly, religiosity and the experience of having a calling are only weakly correlated. Moreover, research shows there are no significant differences between religious and nonreligious individuals in correlates of calling with positive mental health and work outcomes (Duffy & Sedlacek, 2010). Thus, the literature on career calling suggests that the construct has moved beyond its original religious connotations and has become relevant for people across religious spectra.

Despite this shift, investigations into how the construct operates across cultures are much more recent. A number of studies have examined calling in Western nations outside the United States (e.g., Domene, 2012; Hagmaier & Abele, 2012, 2014; Hirschi, 2012; Hirschi & Herrmann, 2012, 2013), most often supporting the use of calling cross-nationally. Additionally, a handful of known studies have explored career calling outside of a Western context (Guo et al., 2014; Park, Sohn, & Ha, 2015; Zhang, Dik, Wei, & Zhang, 2014). Only one known study (Douglass, Duffy, & Autin, 2015) has examined the construct in an Indian context. Douglass, Duffy, and Autin (2015) found that, despite calling's Western lineage, Indian participants were more likely than Americans to report that they felt a calling and that they lived it out. Interestingly, they also found that living a calling had a stronger association with job and life satisfaction for the U.S. sample than for the Indian sample.

Although Douglass et al. (2015) contributed to the literature by beginning to examine the construct in an unexamined Eastern nation, they did not assess the cross-cultural validity of calling measures. It is widely recognized that cross-cultural adaptation is crucial to ensuring the content validity of measures (Beaton, Bombardier, Guillemin, & Ferraz, 2000). In the current study, we will assess the cross-cultural validity of common instruments that are used in calling research. Specifically, we will assess validity of instruments used to measure having a calling, searching for a calling, and living a calling.

Having, Searching for, and Living a Calling

Currently, there is no unified theory of career calling; rather it is a construct that is often interwoven into broader career theories with similar constructs (e.g., self-determination theory; Duffy & Dik, 2013). Modern psychological research on calling identified the construct as a work orientation (Davidson & Caddell, 1994; Treadgold, 1999; Wrzesniewski et al., 1997). That is, one could view work as a job, a career, or a calling (Wrzesniewski et al., 1997). People who view work as a job primarily value work for its financial reward; people who view work as a career primarily value it for its provision of opportunity for achievement; and people who view work as a calling value it primarily for its eudemonic qualities of meaningfulness, prosocial impact, and enmeshment with one's identity (Wrzesniewski et al., 1997).

In more recent work, this conceptualization of calling has evolved to be more complex with delineations within the calling orientation of (1) having a calling, (2) searching for a calling, and (3) living one's calling out in daily work life (Duffy & Autin, 2013; Dik, Eldredge, Steger, & Duffy, 2012). Researchers (Duffy, Bott, Allan, & Torrey, 2012; Dik et al., 2012) have developed and validated measures for each of these aspects of the larger calling construct. It is this group of measures that we will test for cross-cultural validity in the current study.

Searching for a calling refers to when a person has not identified a calling to a specific line of work but has the desire to do so. When a person is searching for a calling, they are looking for an occupation in which they will find personal fulfillment and meaning as well as be able to use their gifts to help others. Having a calling refers to when a person has identified an occupation to which they feel called. They know what their calling is, and they may or may not be engaging in that occupation fully or at all. Living a calling refers to when a person has a calling and is able to engage in work that allows their calling to manifest on a regular basis. Duffy, Douglass, and Autin (2015) compared having a calling to owning a car and living a calling to actually being able to drive the car. Extending their metaphor, searching for a calling is like shopping for a car prior to finding the perfect one.

Work in the United States and India

Given its Western, Protestant roots (Hardy, 1990), calling may not manifest identically in non-Western cultures. Furthermore, cultural, socioeconomic, and religious differences between the United States and India have the potential to contribute to a difference in the overall work culture. This may, in turn, contribute to cross-cultural differences in the perceptions of searching for a calling, having a calling, and living a calling. In the United States, the "Protestant work ethic" (PWE; Weber, 1958) is at the root of the construct of calling. In this paradigm, work and industriousness are seen as a duty and critical parts of an individual's identity. In Indian samples, Agarwala (1978) found that workers were less likely to report a sense of identification and commitment to their work. This is interesting in the context of Douglass et al.'s (2015) recent findings that Indian participants endorsed higher levels of both having a calling and living a calling than U.S. participants. Specifically, past scholars have framed calling as an orientation to work in which work plays a central role in a person's life and identity. This may suggest that underlying mechanisms of developing and living out a calling differ between the two nations. On the other hand, despite India's Eastern roots, Indian participants have been found to endorse a PWE more than British participants (Furnham & Rajamanickam, 1992), and many Indian industries have rapidly become more Westernized over recent decades (Adair, Belanger, & Dion, 1998; Gamage & Wickramasinghe, 2012). This suggests that perceptions of overall work culture in the United States and India may be more similar than different and provides some support for validity in translation of the construct across cultures.

There is also reason to believe that socioeconomic differences might contribute to work culture differences as they apply to experiencing and living out a calling. When compared to the United States, India has significantly higher rates of poverty and lower levels of literacy (Varadharajan, Thomas, & Kurpad, 2013). In addition, the Indian caste system plays a role in the availability of career opportunities, and people of lower castes continue to remain at an educational, social, and economic disadvantage. Arulmani, Van Laar, and Easton (2003) suggest that the intergenerational perpetuation of poverty evident in India may be due to negative career beliefs that are internalized by whole castes and communities and transmitted to youth through social learning. In spite of efforts to address and reduce these barriers, this gap in education, income, and transmission of social values may limit the general Indian population in their work choice. Previous research has shown that people with less economic and social resources are less likely to live out their calling (Duffy & Autin, 2013; Duffy et al., 2013; Duffy, Bott, et al., 2015). Although it is beyond the scope of this study to examine the specific social, economic, and cultural factors, it is important to note that these factors might create cultural differences in searching for, perceiving, and living out a calling.

Cultural Equivalence

As interest in international psychology grows (e.g., Arnett, 2008; Leung, 2003), it is necessary to test cultural equivalence of constructs under study. There are several standards by which cultural equivalence is measured. Lonner (1985) proposed four primary types of equivalence: *functional equivalence* means that one construct serves the same purpose across cultures. *Conceptual equivalence* suggests that a construct maintains the same conceptual meaning across cultures. *Linguistic equivalence* refers to the way in which items are worded when translated from one language to another. *Metric equivalence* refers to the equivalence of psychometric properties of scales from one culture to another. In the current study, our focus is on the metric equivalence of three measures assessing search for, presence of, and living out a calling.

Typically, metric equivalence of a measure is established using exploratory and confirmatory factor analysis (CFA) and structural equation modeling (Ægisdóttir, Gerstein, & Çinarbaş, 2008). Using these methods, a hierarchy of invariance is established in three steps that get systematically more stringent. First, structural invariance is established. Structural equivalence suggests that the underlying construct maintains the same structure and meaning across cultures. Although the construct retains its meaning across cultures, it may not be necessarily operationalized in the same way however. The second level of equivalence is weak factorial equivalence, meaning that scales operate on the same metric across groups. For example, Fahrenheit and Celsius both measure the same construct (temperature), but they differ in their metric by 273 degrees (Ægisdóttir et al., 2008). Thus, if a scale lacks weak invariance, means may be compared within groups but cannot be compared between groups, as the measurement unit differs across groups. Finally, the most stringent level of equivalence is strong invariance, which suggests no bias in measurement and that group averages can be directly compared. In the current study, we test scales for these three types of metric equivalence (Ægisdóttir et al., 2008).

Present Study

In the present study, we aim to examine the cross-cultural metric validity of instruments assessing searching for, having, and living out a calling. Specifically, we will conduct measurement invariance on the three scales most frequently used in psychological research to assess calling. Because of the evidence supporting potential differences in factor structure across groups, we suspect that there may be differences in how the construct operates across nations. However, due to the exploratory nature of the study, we make no formal hypotheses regarding differences.

Method

Participants

The American sample consisted of 336 adults who ranged in age from 18 to 71 ($M = 35.39$, $SD = 11.81$) and self-identified as female ($n = 185$, 55.2%), male ($n = 145$, 43.2%), transgender ($n = 2$, 0.6%), and other ($n = 3$; 0.9%). In terms of race/ethnicity, participants mainly self-identified as White/European American/Caucasian ($n = 257$, 76.5%), with remaining participants identifying as African/African American ($n = 25$, 7.4%), Hispanic/Latina/o American ($n = 18$, 5.4%), Asian/Asian American ($n = 17$, 5.1%), multiracial ($n = 14$, 4.2%), Asian Indian ($n = 5$, 1.5%), and American Indian/native American ($n = 2$, 0.6%). In terms of education, 12.5% ($n = 42$) had a high school education or less, 4.5% ($n = 15$) had a trade or vocational school diploma, 33.3% ($n = 112$) had some college, 36.3% ($n = 122$) had a college degree, and 13.1% ($n = 44$) had a professional or graduate degree. Of the sample, 66.3% ($n = 222$) of participants were employed full-time and 33.7% ($n = 113$) were employed part-time. The sample captured a wide range of occupations. The most frequently reported job titles included customer service representative ($n = 15$; 4.5%), administrative assistant ($n = 14$; 4.2%), manager/executive ($n = 14$; 4.2), salesperson ($n = 11$; 3.3%), teacher ($n = 9$; 2.7%), writer ($n = 11$; 2.7%), and food service worker ($n = 8$; 2.4%).

The Indian sample consisted of 321 adults who ranged in age from 19 to 68 ($M = 30.59$, $SD = 8.79$) and self-identified as female ($n = 143$, 43.7%) and male ($n = 184$, 56.3%). In terms of race/ethnicity, participants mainly self-identified as Asian Indian ($n = 286$, 87.5%) with remaining participants identifying as Asian ($n = 26$, 8.0%), Indian American ($n = 7$, 2.1%), White/European American/Caucasian ($n = 3$, 0.9%), multiracial ($n = 2$, 0.6%), and Other ($n = 1$, 0.3%). In terms of education, 3.3% ($n = 11$) had a high school education or less, 1.2% ($n = 4$) had a trade or vocational school diploma, 8.9% ($n = 29$) had some college, 54.1% ($n = 177$) had a college degree, and 31.8% ($n = 104$) had a professional or graduate degree. Of the sample, 70.9% ($n = 232$) of participants were employed full-time and 28.8% ($n = 94$) were employed part-time. The sample captured a wide range of occupations. The most frequently reported job titles included manager/executive ($n = 61$; 18.7%), engineer ($n = 32$; 9.8%), software developer ($n = 22$; 6.7%), teacher ($n = 18$; 5.5%), accountant ($n = 13$; 4.0%), clerk ($n = 11$; 3.4%), and computer programmer (n = 6; 1.8%).

Instruments

Calling and Vocation Questionnaire (CVQ). The CVQ (Dik et al., 2012) contains two measures, the first of which (the search scale) assesses how much people are searching for a career in which they feel a transcendent internal or external pull, find purpose, and can serve others (termed a *calling*). The second measure (the presence scale) assesses how much people actually perceive themselves as having such a calling. Each measure has three subscales that correspond with the above description of a calling: purposeful work, prosocial orientation, and transcendent summons. A sample item from the presence subscale is "I believe that I have been called to my current line of work" and a sample item from the search subscale is "I'm searching for my calling in my career." Items are answered on a 4-point scale (1 = *not at all true of me* to 4 = *absolutely true of me*). The measure was initially validated on a college student population in the United States (Dik et al., 2012) and has since been validated in adult populations in the United States (e.g., Allan & Duffy, 2013). Previous research has found scores on the subscales to correlate in expected directions related variables including work hope, prosocial work motivation, life meaning, life satisfaction, self-efficacy, career commitment, and job satisfaction (Allan & Duffy, 2013, 2014; Dik et al., 2012; Domene, 2012) as well as to other validated measures of calling (Duffy, Autin, Allan, & Douglass, 2014). In the initial validation study of the CVQ, Dik, Eldredge, Steger, and Duffy (2012) reported internal consistency coefficients of the presence subscales at $\alpha = .85$ and above and internal consistency coefficients of the search

subscales at $\alpha = .88$ and above. One-month test–retest reliability of both measures were $r = .75$ and $r = .67$, respectively. For the current study, the estimated internal consistencies of the presence of calling scale scores were $\alpha = .89$ (American) and $\alpha = .84$ (Indian). The estimated internal consistencies of the search for calling scale scores were $\alpha = .88$ (American) and $\alpha = .87$ (Indian).

Brief Calling Scale (BCS). The second measure of calling was the BCS (Dik et al., 2012). The BCS was developed in tandem with the CVQ and is a broader measure of how much one is searching for and perceives a calling. Unlike the CVQ, there are no subscales delineating the three parts (transcendent summons, purposeful work, and prosocial orientation) of Dik and Duffy's (2009) definition of calling. Participants are provided with a brief, broad description of a calling that allows for inter-pretation by the respondent. Thus, when responding to BCS items, participants may do so with their own conceptions of calling—which may or may not reflect Dik and Duffy's (2009) definition—in mind. The BCS consists of 4 items answered on a 5-point scale (1 = *not at all true of me* to 5 = *totally true of me*). Like the CVQ, the BCS also consist of presence and search subscales. The presence subscale contains the items "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 search subscale contains the items "I am trying to figure out my calling in my career" and "I am searching for my calling as it applies to my career." The BCS was validated on a college student sample (Dik et al., 2012), and has since been used in many studies examining both college students and working adults (e.g., Creed, Rogers, Praskova, & Searle, 2014; Duffy, Douglass, Autin, & Allan, 2014; Duffy & Sedlacek, 2007; Hirschi & Herrmann, 2013; Praskova, Creed, & Hood, 2014), each finding the scale to be reliable and to correlate in expected directions with vocational development variables. Furthermore, in a recent study, comparing several instruments used to measure calling, the BCS was the most strongly correlated instrument with a face-valid item reflecting having a calling (Duffy, Autin, et al., 2015). Because each subscale consists of only 2 items, internal consistency reliability is typically assessed with pearson correlations instead of Cronbach's α estimates. In the initial validation of the study, correlations were $r = .81$ for the presence subscale and $r = .75$ for the search subscale. In the current study, correlations between presence were $r = .77$ (American) and $r = .72$ (Indian). Correlations between search items were $r = .89$ (American) and $r = .65$ (Indian).

Living Calling Scale (LCS). The degree to which participants perceived that they were living their callings via aspects of their current occupations was assessed with the 6-item LCS (Duffy, Bott, Allan, Torrey, & Dik, 2012). Sample items include, "I am currently working in a job that closely aligns with my calling" and "I am working in a job to which I feel called." Participants responded to items on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*), and scores on the 6 items were added together to get a total living calling score. The scale was initially developed and validated using a sample of employed adults in the United States (Duffy et al., 2012). Several studies have found the LCS to correlate in expected directions with related variables including presence of a calling, life meaning, academic satisfaction, and job satisfaction (Duffy, Allan, Autin, & Douglass, 2014; Duffy, Allan, Bott, & Dik, 2014; Duffy & Autin, 2013; Duffy, Bott, et al, 2015; Duffy et al., 2013). Duffy, Bott, Allan, Torrey, and Dik (2012) found the scale to have strong internal consistency reliability ($\alpha = .85$). In the current study, the estimated internal consistency of the scale scores was $\alpha = .94$ (American) and $\alpha = .85$ (Indian).

Procedure

Given the diversity of language in India, English is a common language that Indians often use to communicate among themselves and is typically taught in primary and secondary schools. English is one of the two official languages in India (Constitution of India, Part 17, Chapter 1), the other being

Hindi, which is predominately spoken in the North and has highly regionalist connotations (Sridhar, 1987). Thus, English language versions of all scales were used. Data were collected through the online data collection service Mechanical Turk (MTurk). MTurk is a website that allows people to take surveys for money. MTurk allowed the collection of a diverse sample from both India and United States. Recent reviews and studies examining MTurk have largely concluded that it produces valid data that are comparable to laboratory and other Internet recruitment methods (Buhrmester, Kwang, & Gosling, 2011; Sprouse, 2011). Moreover, people typically report enjoyment as the major reason they use MTurk rather than for remuneration (Buhrmester et al., 2011). A link including an informed consent document and the survey itself was posted on MTurk, and in order to participate, participants had to (a) be above the age of 18, (b) reside within the United States or India, and (b) be employed at least part-time. Participants were given US$.30 for taking part in the study. The initial sample size was 871, but 3 validity items were inserted within the survey, which 150 participants did not answer correctly so they were removed. Also, 22 people responded to some demographic items but did not answer any study questionnaires and 36 participants were unemployed. These participants were also removed. Finally, as discussed below, one case was removed as an outlier. This left the final sample of 663 participants, 336 of which were from the United States and 327 of which were from India.

Results

Missing Data

Of the 663 participants, 528 had no missing data, 78 were missing data on one study variable, 29 were missing data on two study variables, and 29 were missing data on three study variables. Of the cases with missing data, 22 were missing data on entire scales, but the pattern of results did not change if these cases were removed. Following the recommendations of experts (Tabachnick & Fidell, 2007), full information maximum likelihood (FIML) was used to impute values for missing data. FIML uses all available information to calculate estimates with added error so as to not bias estimates. Several experts (Singer & Willett, 2003; Tabachnick & Fidell, 2007) argue that approaches like FIML are superior to the traditional techniques, such as listwise deletion and mean substitution, which tend to discard valuable information and bias estimates. However, FIML can bias estimates if the pattern of missing data is not random. If missing data have no pattern, it is called missing completely at random (MCAR). When the pattern of missingness can be predicted from study variables, it is termed missing at random. If the pattern of missingness is related to the dependent variable, it is called missing not at random. The latter case cannot be ignored.

In order to test the pattern of missingness in the current study, a dummy-coded variable was created that separated those with and without missing data (Tabachnick & Fidell, 2007). A series of *t*-tests was conducted with this variable predicting all study variables and available continuous demographics, including income and age. A series of χ^2 cross-tab analyses were conducted for noncontinuous demographics, including gender and employment status (i.e., full or part time). The missing data variable did not significantly predict any of the study or demographic variables. Therefore, the evidence suggests that the pattern of missing data was MCAR, making FIML an appropriate and preferable approach to handling missing data.

Preliminary Analyses

No variables had absolute skewness or kurtosis values above 1, and all appeared normally distributed on visually inspected histograms. Tables 1 and 2 display the descriptive statistics and correlations for the American and Indian samples, respectively. The presence of calling and living calling interrcorrelated for the American sample and the Indian sample.

Table 1. Descriptive Statistics and Correlations for U.S. Sample.

Calling Measure	1	2	3	4	5
1. CVQ presence	—				
2. CVQ search	.39**	—			
3. BCS presence	.62**	.17**	—		
4. BCS search	.04	.51*	−.03	—	
5. LCS	.66**	<.01	.50**	−.09	—
M	28.27	29.57	5.64	5.07	23.10
SD	8.49	8.03	2.59	2.74	10.95

Note. n = 336. CVQ = Calling and Vocation Questionnaire; BCS = Brief Calling Scale; LCS = Living Calling Scale.
*p < .05. **p < .01.

Table 2. Descriptive Correlations for Indian Sample.

Calling Measure	1	2	3	4	5
1. CVQ presence	—				
2. CVQ search	.54**	—			
3. BCS presence	.58**	.37**	—		
4. BCS search	.34**	.51*	.54**	—	
5. LCS	.55**	.24**	.57**	.39**	—
M	34.31	32.62	6.94	6.50	31.67
SD	6.01	6.76	2.03	2.17	7.60

Note. n = 327. CVQ = Calling and Vocation Questionnaire; BCS = Brief Calling Scale; LCS = Living Calling Scale.
*p < .05. **p < .01.

Measurement Invariance

To test if the factor structures of the measures held up in both the American and Indian samples, we used measurement invariance analyses. First, we constructed CFA models in AMOS 18 (Arbuckle, 2007) and created two groups: the American and Indian samples. We then successively constrained parameters across the American and Indian samples in three models: the configural, weak invariance, and strong invariance models (Little, 2008). A poor fit in any of these models suggests that the aspect being constrained does not operate consistently for the different groups (Little, 2008). Reduction in fit between the models can also be tested with a χ^2 test. However, a reduction in the fit of a model should not be used alone to determine whether a measure can be used within groups: The absolute value of fit indices should also be considered (Little, 2008).

The configural model constrains only the relative configuration of variables in the model to be the same in both groups. In other words, no factor loadings or indicator means are constrained to be the same across groups, but the model structure is held constant across groups. Poor fit here suggests that the organization of indicators is different for both groups. Next, in weak factorial invariance, the configuration of variables and all factor loadings are constrained to be the same for each group. Poor fit here suggests that the factor loadings vary in size between the two groups. Finally, in strong factorial invariance, both the configuration, factor loadings, and the indicator means are constrained to be the same for each group. A reduction in fit here, but not in the previous steps, suggests that indicators have different means in both groups, which might be expected when comparing two groups of people, such as in a *t*-test. Therefore, poor fit in only this model does not necessarily indicate the factor structure operates differently for different groups.

To evaluate the models, we used fit indices that limited the likelihood of Type 1 and Type II errors (Hu & Bentler, 1999). These included the χ^2, the comparative fit index (CFI), and the root

mean square error of approximation (RMSEA). A significant χ^2 can indicate poor fit. This test, however, is unreliable and tends to be inflated in larger samples (Tabachnick & Fidell, 2007). Criteria for the CFI have ranged from less conservative (CFI $\geq$ .90) to more conservative (CFI $\geq$ .95; Hu & Bentler, 1999; Quintana & Maxwell, 1999; Weston & Gore, 2006). Similarly, criteria for the RMSEA has ranged from less conservative ($\leq$.10) to more conservative (RMSEA $\leq$ .08; Hu & Bentler, 1999; Quintana & Maxwell, 1999; Weston & Gore, 2006). Researchers have advised caution when using these criteria as strict cutoffs, and other factors such as sample size and model complexity should be considered (Weston & Gore, 2006).

CVQ–Presence. Items were loaded on their respective subscale factors (i.e., purposeful work, prosocial orientation, and transcendent summons), which then loaded on a second-order presence of calling construct. The configural model had good fit indices, $\chi^2(104) = 297.62$, $p < .001$; CFI = .94; and RMSEA = .05, 90% confidence interval (CI) = [.05, .06]. The weak factorial model still had good fit indices, $\chi^2(115) = 326.29$, $p < .001$; CFI = .93; and RMSEA = .06, 90% CI [.05, .06], but it was significantly different from the configural model, $\chi^2(11) = 49.04$, $p < .001$, $\chi^2(11) = 28.67$, $p < .001$. This suggests that factor loadings varied between groups but not enough to reject the model for both groups. Finally, when factor loadings and indicator means were constrained to be the same in the strong invariance model, fit was poor, $\chi^2(127) = 487.08$, $p < .001$; CFI = .88; and RMSEA = .07, $p < .001$, 90% CI [.06, .07], and this change was significantly different from the weak factorial model, $\chi^2(12) = 160.79$, $p < .001$. Overall, this analysis suggests that the factor structure of the presence subscale of the CVQ varied between the American and Indian samples, but that the models retained good fit in and of themselves.

CVQ–Search. Items were loaded on their respective subscale factors (i.e., purposeful work, prosocial orientation, and transcendent summons), which then loaded on a second-order search for calling construct. The configural model had borderline fit indices, $\chi^2(104) = 406.20$, $p < .001$; CFI = .90; and RMSEA = .07, 90% CI [.06, .07]. However, fit was poor when loadings were constrained to be the same in both groups, $\chi^2(115) = 461.08$, $p < .001$; CFI = .89; and RMSEA = .07, 90% CI [.06, .07], and this change was significant, $\chi^2(11) = 54.88$, $p < .001$. This suggests that factor loadings varied between groups. The fit was eroded further when factor loadings and indicator means were constrained to be the same, $\chi^2(127) = 531.80$, $p < .001$; CFI = .87; and RMSEA = .07, 90% CI [.06, .08], and this change was also significant, $\chi^2(12) = 70.72$, $p < .001$.

BCS. Due to there being only 2 items per subscale in the BCS, we included both the presence of and search for calling items in the analysis. Items for presence and search were loaded onto their respective factors, and the presence and search factors were allowed to correlate. The configural model had borderline fit indices, $\chi^2(4) = 42.77$, $p < .001$; CFI = .97; and RMSEA = .12, 90% CI [.09, .16]. The fit was the same when loadings were constrained to be the same in both groups, $\chi^2(6) = 46.08$, $p < .01$; CFI = .97; and RMSEA = .10, 90% CI [.08, .13], and the change in fit was not significant, $\chi^2(2) = 3.31$, $p = .19$. However, fit was degraded when factor loadings and indicator means were constrained to be the same in the strong invariance model, $\chi^2(6) = 144.31$, $p < .001$; CFI = .90; and RMSEA = .14, 90% CI [.12, .16], and this model was significantly different than the weak factorial model, $\chi^2(6) = 98.24$, $p < .001$.

During analysis, we noticed that the presence and search constructs were correlated differently for both samples. The American sample had a correlation of $r = -.10$, $p = .34$, and the Indian sample had a correlation of $r = .49$, $p < .001$. We therefore retested the measurement invariance of the weak factorial model but also restricted the covariance between the presence and search constructs to be the same. This eroded the fit of the model, $\chi^2(7) = 79.74$, $p < .001$; CFI = .95; and RMSEA = .13, 90% CI [.10, .15], and this change was significant, $\chi^2(3) = 36.96$, $p < .001$.

Therefore, the factor structure of the BCS was consistent across the American and Indian samples but not when the correlation between subscales was constricted.

LCS. Items all loaded on one living calling factor. The configural model had borderline fit indices, $\chi^2(18) = 151.89$, $p < .001$; CFI = .94; and RMSEA = .11, 90% CI [.09, .12], and when loadings were constrained to be the same in both groups, fit slightly improved, $\chi^2(23) = 157.09$, $p < .001$; CFI = .94; and RMSEA = .10, 90% CI [.08, .11]. However, this change was not significant, $\chi^2(5) = 5.20$, $p = .39$. Finally, when factor loadings and indicator means were constrained to be the same, fit declined considerably, $\chi^2(29) = 294.95$, $p < .001$; CFI = .89; and RMSEA = .12, 90% CI [.11, .13], and this change was significant $\chi^2(6) = 137.86$, $p < .001$.

Discussion

The aim of the current study was to assess cross-cultural validity of three common measures used to assess career calling—the CVQ (Dik et al., 2012), the BCS (Dik et al., 2012), and the LCS (Duffy et al., 2012). Results from measurement invariance analyses supported metric equivalence of the career calling scales to varying degrees.

For the presence subscale of the CVQ, acceptable fit was maintained through the configural and weak factorial levels of invariance, but the model failed to maintain adequate fit at the strong invariance level. This provides evidence that the overarching factor structure of the CVQ–Presence Scale is similar in both groups and that item parcels load onto their factors in a similar pattern across both groups. In other words, it seems that the CVQ measures a common construct in both India and the United States and that the unit of measurement operates on a similar scale within both groups. However, the failure to obtain strong invariance implies that the groups have significantly different intercepts (or starting points) on the scale. Because of the group differences in intercepts, current data imply that, although it may be appropriate to use the scale for within-group analysis, it cannot be used to make valid cross-group comparisons.

For the CVQ–Search Scale, fit statistics reflecting configural invariance were borderline. Furthermore, the fit was significantly degraded when constraints were placed on the factor loadings and degraded even further when constraints were placed on the factor intercepts. Given the borderline fit statistics of the configural model, results should be interpreted with caution. In addition to weak evidence that the overall structure of latent factors may be consistent across groups, the scale likely operates on differing measurement units and has significantly different intercepts across groups. Thus, evidence for a culturally relevant construct of search for calling as measured by the CVQ is limited.

For the BCS, initial fit indices were borderline, so we cannot conclude that the arrangement of items and latent factors is consistent across groups. This is interesting, given that the BCS provides respondents with a broad definition of calling and simply asks if the respondent has a calling and if they are searching for their calling, leaving them relatively open to interpretation on the part of the respondent. Furthermore, we noticed in preliminary correlation analyses that, whereas the correlation between the Presence and the Search subscale of the BCS was nonsignificant in the U.S. sample, the correlation was strong and significant in the Indian sample. Therefore, we constrained the correlation in the CFA and found that this significantly degraded fit, suggesting that the correlations between the subscales differed across samples.

Previous research has found similar relations between search for and presence of life meaning in a study comparing the construct across Japanese and U.S. samples (Steger, Kawabata, Shimai, & Otake, 2008). Similar to our findings, Steger and colleagues (2008) found that, whereas relations between search and presence for meaning were negative in the U.S. sample, they were positive in the Japanese sample. The authors attributed this to differing cognitive processes associated with

individualism and collectivism. Specifically, they theorized that people from collectivistic societies engage in more dialectical and cyclical thinking patterns; from this lens, one might have high levels of meaning *and* be searching for meaning. Conversely people from individualistic societies are more likely to engage in analytical, linear thinking patterns; from this lens, if one already has meaning, they would not be searching for it. Although no conclusions can be drawn without future research, we speculate that an underlying cultural construct, perhaps individualism/collectivism, may explain the differing relations in search for and presence of calling that emerged from our data.

Finally, results indicated borderline evidence that the configuration of the LCS model may be consistent across groups. When factor loadings were constrained to equivalency, the fit did not change significantly. This finding should be interpreted with caution given the borderline fit statistics of the configural model. Therefore, results regarding the LCS are inconclusive, and future research is needed to determine equivalency of the measure across groups.

Overall, results partially support the use of calling measures in India. Although results regarding the LCS and BCS were inconclusive and use the CVQ–Search Scale was not supported, there was fairly strong evidence that the CVQ–Presence Scale may be metrically valid among the people from India. Future research is needed to gain a clearer picture of why intercept means differed across groups and how the scale may be adjusted to allow for cross-group comparisons.

Practical Implications

Demonstrating the cross-cultural validity of the CVQ–Presence Scale (and failure to demonstrate validity in the remaining scales) is an important contribution to the calling literature and has practical implications for both researchers and practitioners. First, it establishes a foundation from which future researchers can test the career calling construct across cultures. We used data from U.S. and Indian participants, and results should not be generalized beyond this population; however, these findings provide support for the idea that calling may be a viable construct to examine in other non-Western cultures. Although results suggest that the measures we tested should not be used to conduct cross-cultural comparisons, they also demonstrated latent factors used in conceptualization of perceiving a calling in the United States are similar among Indian participants. In particular, our results suggest that the CVQ may be an appropriate measure to use in conducting within-group studies on career calling in India. Additionally, the failure to demonstrate measurement equivalence for the other calling measures generates future research questions regarding how the construct differs across cultures and how scales might be revised to better reflect cultural differences.

Regarding counseling and career development professionals, results provide implications for the use of calling when providing services to a diverse range of clientele. Given the indication that perceiving a career calling is endorsed by people from both Western and non-Western contexts as well as traditionally Christian and non-Christian contexts, it may be useful to explore the degree to which individuals from a variety of backgrounds perceive a calling. Although counseling and specifically career counseling is still in its nascent stages in India (Jain & Sandhu, 2015), the current study supports the potential exploration of career calling with Indian clients. It is important to note that, because our results failed to support several aspects cross-cultural equivalence, it is likely that, even if career calling is a viable construct to explore, it may manifest differently than with Western clients. More research is needed to gain a clearer picture of how manifestations of career calling differ across cultures. As previously recommended by Dik, Duffy, and Eldridge (2009), it is important to always consult with the client about the salience of calling to in their life. Particularly because this finding is novel and cultural differences in manifestation of calling are largely unexplored, it is imperative that practitioners use active listening to understand the individual client's relation with having and living out a calling before attempting to incorporate the construct into counseling services.

Limitations and Future Directions

Despite the positive findings and implications, the results of this study must be considered in light of its potential limitations. First, the study used cross-sectional data collected via self-report, and although this is a common methodology, it has drawn criticism due to its inability to make causal interpretations (Spector, 1994). Second, the demographics show that 1.5% of participants in the U.S. sample identified as Asian Indian and 2.1% of the Indian sample identified as Indian American. Although these participants constitute a negligible portion of the sample, it is possible that the cultural characteristics of these participants did not neatly fit with the sample they were grouped into and may have contributed to racial confounds.

Third, although the use of MTurk has been validated in American samples (e.g., Buhrmester et al., 2011; Sprouse, 2011), the validity of MTurk for Indian samples is unclear, and the sample may not be representative of the larger Indian population. For example, given the disparity of Internet access in India based on socioeconomic status (SES) and that the majority of the participants identified with the manager/executive job title, the results of this study may not generalize to the general Indian population. Likewise, the questionnaire was administered in English. Although it is common for primary and secondary schools to each in the English language, proficiency in English is more common among people in higher social classes. Therefore, the sample was likely biased toward higher SES Indian individuals. Although MTurk allowed the access to Indian workers that would otherwise be very difficult to obtain, future cross-cultural studies in this area should attempt to recruit people from all levels of Indian society.

Future studies can address some of these limitations by ensuring a larger and more diverse sample of participants and by using longitudinal or experimental methods to investigate cross-cultural differences. Further, it is important to examine potential reasons for the lack of validity demonstrated by the Search subscale of the CVQ and the inconclusive rein Indian populations. For instance, future studies can examine whether cultural characteristics such as individualism and collectivism contribute to differences in conceptualization of different aspects of working. This may also help explain reasons for the higher reports of searching for, having, and living out a calling in Indian samples.

References

Adair, J. G., Bélanger, D., & Dion, K. L. (Eds.). (1998). *Advances in psychological science: Social, personal, and cultural aspects* (Vol. *1*). Hove, England: Psychology Press.

Agarwala, U. N. (1978). Measuring job involvement in India. *Indian Journal of Industrial Relations*, *14*, 219–231.

Allan, B. A., & Duffy, R. D. (2013). Calling, goals, and life satisfaction: A moderated mediation model. *Journal of Career Assessment*, *22*, 451–464. doi:10.1177/1069072713498574

Allan, B. A., & Duffy, R. D. (2014). Examining moderators of signature strengths use and well being: Calling and signature strength level. *Journal of Happiness Studies*, *15*, 323–337. doi:10.1007/s10902-013-9424-0

Arbuckle, J. L. (2007). *Amos 18 user's guide*. Chicago, IL: SPSS Inc.

Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist*, *63*, 602. doi:http://dx.doi.org/10.1037/0003-066X.63.7.602

Arulmani, G., Van Laar, D., & Easton, S. (2003). The influence of career beliefs and socio economic status on the career decision-making of high school students in India. *International Journal for Educational and Vocational Guidance*, *3*, 193–204.

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*, 3186–3191.

Bellman, G. M. (1990). *The consultant's calling: Bringing who you are to what you do*. San Francisco, CA: Jossey-Bass.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*, 3–5. doi:10.1177/1745691610393980

Creed, P. A., Rogers, M. E., Praskova, A., & Searle, J. (2014). Career calling as a personal resource moderator between environmental demands and burnout in Australian junior doctors. *Journal of Career Development*, *41*, 547–561. doi:10.1177/0894845313520493

Davidson, J., & Caddell, D. (1994). Religion and the meaning of work. *Journal for the Scientific Study of Religion*, *33*, 135–147. doi:10.2307/1386600

Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work definitions and prospects for research and practice. *The Counseling Psychologist*, *37*, 424–450. doi:10.1177/0011000008316430

Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (2012). Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling Scale (BCS). *Journal of Career Assessment*, *20*, 242–263. doi:10.1177/1069072711434410

Domene, J. F. (2012). Calling and career outcome expectations: The mediating role of self efficacy. *Journal of Career Assessment*, *20*, 281–292. doi:10.1177/1069072711434413

Douglass, R. P., Duffy, R. D., & Autin, K. L. (2015). Living a calling, nationality, and life satisfaction: A moderated, multiple mediator model. *Journal of Career Assessment*. doi:10.1177/1069072715580324

Duffy, R. D., Allan, B. A., Autin, K. L., & Bott, E. M. (2013). Calling and life satisfaction: It's not about having it, it's about living it. *Journal of Counseling Psychology*, *60*, 42. doi:10.1037/a0030635

Duffy, R. D., Allan, B. A., Autin, K. L., & Douglass, R. P. (2014). Living a calling and work well-being: A longitudinal study. *Journal of Counseling Psychology*, *61*, 605–615. doi:10.1037/cou0000042

Duffy, R. D., Allan, B. A., Bott, E. M., & Dik, B. J. (2014). Does the source of a calling matter? External summons, destiny, and perfect fit. *Journal of Career Assessment*, *22*, 562–574. doi:10.1177/1069072713514812

Duffy, R. D., & Autin, K. L. (2013). Disentangling the link between perceiving a calling and living a calling. *Journal of Counseling Psychology*, *60*, 219. doi:10.1037/a0031934

Duffy, R. D., Autin, K. L., Allan, B. A., & Douglass, R. P. (2015). Assessing work as a calling: An evaluation of instruments and practice recommendations. *Journal of Career Assessment*, *23*, 351–366. doi:10.1177/1069072714547163

Duffy, R. D., Bott, E. M., Allan, B. A., & Autin, K. L. (2015). Calling among the unemployed: Examining prevalence and links to coping with job loss. *The Journal of Positive Psychology*, *10*, 332–345. doi:10.1080/17439760.2014.96779

Duffy, R. D., Bott, E. M., Allan, B. A., Torrey, C. L., & Dik, B. J. (2012). Perceiving a calling, living a calling, and job satisfaction: Testing a moderated, multiple mediator model. *Journal of Counseling Psychology*, *59*, 50–59. doi:10.1037/a002612

Duffy, R. D., & Dik, B. J. (2013). Research on calling: What have we learned and where are we going? *Journal of Vocational Behavior*, *83*, 428–436. doi:10.1016/j.jvb.2013.06.006

Duffy, R. D., Douglass, R. P., & Autin, K. L. (2015). The dark side of callings. In D. B. Yaden, T. D. McCall, & J. H. Ellens (Eds.), *Being called: Secular, sacred, and scientific perspectives* (pp. 13–25). Santa Barbara, CA: Praeger.

Duffy, R. D., Douglass, R. P., Autin, K. L., & Allan, B. A. (2014). Examining predictors and outcomes of a career calling among undergraduate students. *Journal of Vocational Behavior*, *85*, 309–318. doi:10.1016/j.jvb.2014.08.009

Duffy, R. D., & Sedlacek, W. E. (2007). The presence of and search for a calling: Connections to career development. *Journal of Vocational Behavior*, *70*, 590–601. doi:10.1016/j.jvb.2007.03.007

Duffy, R. D., & Sedlacek, W. E. (2010). The salience of a career calling among college students: Exploring group differences and links to religiousness, life meaning, and life satisfaction. *The Career Development Quarterly*, *59*, 27–41. doi:10.1002/j.2161-0045.2010.tb00128.x

Ægisdóttir, S., Gerstein, L. H., & Çinarbas, D. C. (2008). Methodological issues in cross-cultural counseling research equivalence, bias, and translations. *The Counseling Psychologist*, *36*, 188–219. doi:10.1177/0011000007305384

Furnham, A., & Rajamanickam, R. (1992). The Protestant work ethic and just world beliefs in Great Britain and India. *International Journal of Psychology*, *27*, 401–416.

Gamage, H. R., & Wickramasinghe, A. (2012). Culture of social institutions and behavioural manifestations in entrepreneurship development: A South-Asian case. *Interdisciplinary Journal of Contemporary Research in Business*, *4*, 64–79. Retrieved from http://ro.uow.edu.au/gsbpapers/361/

Guo, Y., Guan, Y., Yang, X., Xu, J., Zhou, X., She, Z., ... Fu, M. (2014). Career adaptability, calling and the professional competence of social work students in China: A career construction perspective. *Journal of Vocational Behavior*, *85*, 394–402. doi:10.1016/j.jvb.2014.09.00

Hagmaier, T., & Abele, A. E. (2012). The multidimensionality of calling: Conceptualization, measurement and a bicultural perspective. *Journal of Vocational Behavior*, *81*, 39–51. doi:10.1016/j.jvb.2012.04.001

Hagmaier, T., & Abele, A. E. (2014). When reality meets ideal: Investigating the relation between calling and life satisfaction. *Journal of Career Assessment*. doi:10.1177/1069072714547164

Hardy, L. (1990). *The fabric of this world: Inquiries into calling, career choice, and the design of human work*. Grand Rapids, MI: Wm. B. Eerdmans.

Hirschi, A. (2012). Callings and work engagement: Moderated mediation model of work meaningfulness, occupational identity, and occupational self-efficacy. *Journal of Counseling Psychology*, *59*, 479–485. doi:10.1037/a0028949

Hirschi, A., & Herrmann, A. (2012). Vocational identity achievement as a mediator of presence of calling and life satisfaction. *Journal of Career Assessment*, *20*, 309–321. doi:10.1177/1069072711436158

Hirschi, A., & Herrmann, A. (2013). Calling and career preparation: Investigating developmental patterns and temporal precedence. *Journal of Vocational Behavior*, *83*, 51–60. doi:10.1016/j.jvb.2013.02.008

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55. doi:10.1080/10705519909540118

Jain, S., & Sandhu, D. S. (2015). Counseling in India. *Counseling Around the World: An International Handbook*, *87*, 87–96.

Leung, S. A. (2003). A journey worth traveling: Globalization of counseling psychology. *The Counseling Psychologist*, *31*, 412–419. doi:10.1177/0011000003031004004

Little, T. (2008, April). Factorial Invariance Revisited: Are we there yet? Invited 3-hour workshop at the Society for Applied Multivariate Research, Kansas City, MO.

Lonner, W. J. (1985). Issues in testing and assessment in cross-cultural counseling. *The Counseling Psychologist*, *13*, 599–614. doi:10.1177/0011000085134004

Park, J., Sohn, Y. W., & Ha, Y. J. (2015). South Korean salespersons' calling, job performance, and organizational citizenship behavior: The mediating role of occupational self efficacy. *Journal of Career Assessment*. doi:10.1177/1069072715599354

Praskova, A., Hood, M., & Creed, P. A. (2014). Testing a calling model of psychological career success in Australian young adults: A longitudinal study. *Journal of Vocational Behavior*, *85*, 125–135. doi:10.1016/j.jvb.2014.04.004

Quintana, S. M., & Maxwell, S. E. (1999). Implications of recent developments in structural equation modeling for counseling psychology. *The Counseling Psychologist*, *27*, 485–527. http://dx.doi.org/10.1177/0011000099274002

Serow, R. C., Eaker, D., & Ciechalski, J. (1992). Calling, service, and legitimacy: Professional orientations and career commitment among prospective teachers. *Journal of Research & Development in Education*. Retrieved from http://psycnet.apa.org/psycinfo/1992-44875-001

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford, UK: Oxford University Press.

Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, *15*, 385–392.

Sprouse, J. (2011). A validation of Amazon Mechanical Turk for the collection of acceptability judgments in linguistic theory. *Behavior Research Methods*, *43*, 155–167. doi:10.3758/s13428-010-0039-7

Sridhar, S. N. (1987). Language variation, attitudes, and rivalry: The spread of Hindi in India. *Georgetown University Round Table on Languages and Linguistics*, 300–319. Retrieved from https://repository.library.georgetown.edu/bitstream/handle/10822/555480/GURT_1987.pdf?sequence=1&isAllowed=y#page=318

Steger, M. F., Kawabata, Y., Shimai, S., & Otake, K. (2008). The meaningful life in Japan and the United States: Levels and correlates of meaning in life. *Journal of Research in Personality*, *42*, 660–678. doi:10.1016/j.jrp.2007.09.003

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th Ed). Boston, MA: Pearson Education.

Treadgold, R. (1999). Transcendent vocations: Their relationship to stress, depression, and clarity of self-concept. *Journal of Humanistic Psychology*, *39*, 81–105. doi:10.1177/0022167899391010

Varadharajan, K. S., Thomas, T., & Kurpad, A. V. (2013). Poverty and the state of nutrition in India. *Asia Pacific Journal of Clinical Nutrition*, *22*, 326–339. doi:10.6133/apjcn.2013.22.3.19

Weber, M. (1958). *The Protestant ethic and the spirit of capitalism*. Los Angeles, CA: Roxbury.

Weston, R., & Gore, P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, *34*, 719–751. http://dx.doi.org/10.1177/0011000006286345

Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, *31*, 21–33. doi:10.1006/jrpe.1997.2162

Zhang, C., Dik, B. J., Wei, J., & Zhang, J. (2014). Work as a calling in China a qualitative study of Chinese College Students. *Journal of Career Assessment*, *23*, 263–249. doi:10.1177/1069072714535029