

This is an unedited manuscript published in the *Journal of Vocational Behavior*. The final version might have undergone minor additional editing in style and content.

Please cite as:

Hirschi, A., Keller, A. C., & Spurk, D. M. (2018). Living one's calling: Job resources as a link between having and living a calling. *Journal of Vocational Behavior*, 106, 1-10. doi: 10.1016/j.jvb.2017.12.001

## **Living One's Calling: Job Resources as a Link Between Having and Living a Calling**

Andreas Hirschi\*<sup>1</sup>, Anita C. Keller<sup>2</sup>, Daniel Spurk<sup>1</sup>

<sup>1</sup> University of Bern

<sup>2</sup> University of Groningen

### Author's Note

\*Correspondence concerning this article should be addressed to Andreas Hirschi, Institute of Psychology, University of Bern, Fabrikstrasse 8, CH -3012 Bern, Switzerland. Email: [andreas.hirschi@psy.unibe.ch](mailto:andreas.hirschi@psy.unibe.ch)

*Acknowledgement.* This research was supported by an individual research grant awarded to Andreas Hirschi by the Deutsche Forschungsgemeinschaft (DFG), GZ: HI 1530/2-1. The funding source had no involvement in the study design, the collection, analysis and interpretation of data, the writing of the report, or the decision to submit the article for publication.

### **Highlights**

- Investigated if job resources link presence of calling with living a calling
- Presence and living a calling positively related to job resources
- Living a calling related to education, leadership position, and salary
- Results suggest that job resources can help to live callings

### **Abstract**

Recent research on calling has pointed to the important distinction between having and living a calling in order to explain the positive effects of callings on well-being. However, how the link between having a calling and living a calling might be explained has only been partially addressed. In the present study, we focused on the neglected role of workplace characteristics as key factors in this regard. In a sample of 232 working adults in Germany, we established that presence of calling and living a calling were significantly related to job resources in terms of decision-making autonomy, task significance, and social support at work. Moreover, presence of calling and living a calling positively related to level of education, leadership position, and salary. Testing indirect effects with bootstrapping analyses, we found that job resources, specifically decision-making autonomy and task significance, partially mediated the relation of presence of calling with living a calling, while controlling for educational level and leadership position. The results support the idea that living a calling is not just about finding work that fits one's calling. People who have a calling are also more likely to live their calling by working in jobs with more job resources.

*Keywords:* Presence of calling; living a calling; work characteristics; job resources

## **Living One's Calling: Job Resources as a Link Between Having and Living a Calling**

Calling has emerged as an important construct in the understanding of subjective career success, well-being at work, and general well-being. Across different samples in different countries, research has established that people who perceive their work as a calling generally report higher work meaningfulness and work engagement as well as life satisfaction, among other positive work and life outcomes (Duffy & Dik, 2013). However, more recently, research on calling has drawn attention to the distinction between having a calling and being able to live a calling (Duffy, Allan, & Bott, 2012; Duffy & Autin, 2013; Duffy, Bott, Allan, Torrey, & Dik, 2012).

Research suggests that having a calling (used herein synonymously with *perceiving a calling* and *presence of a calling*) without being able to live the calling might be more detrimental to well-being than having no calling at all (Duffy, Douglass, Autin, England, & Dik, 2016; Gazica & Spector, 2015). Other research found that living a calling correlates only moderately with presence of calling and that living a calling shows stronger correlations with life satisfaction, career commitment, work meaning, and job satisfaction than does having a calling (Duffy, Allan, et al., 2012; Duffy, Bott, et al., 2012). Moreover, living a calling is related to higher educational level and income, while presence of calling is not (Duffy, Allan, Autin, & Bott, 2013; Duffy & Autin, 2013; Duffy, England, Douglass, Autin, & Allan, 2017). In sum, recent empirical results suggest that the repeatedly reported positive effects of having a calling depend largely on the degree to which a person is able to actually live his or her calling. Moreover, findings imply that not everybody is able to live their calling, leading to the important question of what circumstances allow people to successfully live their calling (i.e., variables that link presence of calling and living a calling). In a first attempt to address this question, Duffy and Autin (2013) found support for their proposition that increased work volition (an individual's perceived capacity to make occupational choices despite constraints) and organizational support are ways in which presence of calling and living a calling are related. However, a range of other factors might be important in this regard, and we lack a more complete understanding of factors that link presence of calling with living a calling. Most importantly, existing research has almost exclusively focused on individual factors to explain differences in living a calling and largely neglected the importance of the work context in this regard.

In the present paper, we advance existing theoretical and empirical research on calling and propose that job resources are an important factor to understand the linkages between having and living a calling. Specifically, the main aims of the present paper are to (1)

theoretically introduce the importance of job resources for our understanding of the working conditions under which callings can be lived; (2) explore the extent to which job resources are related to presence of calling and to living a calling; and (3) evaluate a theoretical model that states that job resources represent a link between having a calling and living a calling. In sum, we will contribute to a better understanding of what factors allow people to be living a calling and thereby make a contribution to a still understudied issue of increasing importance in the calling literature (Duffy & Dik, 2013).

### **Having a Calling and Living a Calling**

Presence of calling can be defined as the belief that one is pursuing a particular line of work due to an external summons that is within one's broader sense of purpose in life and that has a prosocial orientation (Dik & Duffy, 2009). A number of empirical studies showed that presence of calling is relatively prevalent among college students and working adults in different professions and is related to a range of positive outcomes, such as career satisfaction, job satisfaction, and life satisfaction (see Duffy & Dik, 2013, for a review). More recently, however, researchers (Berg, Grant, & Johnson, 2010; Duffy, Bott, et al., 2012; Duffy, Douglass, et al., 2016; Gazica & Spector, 2015) have begun to recognize that presence of calling is not always sufficient to yield positive individual and organizational outcomes; actually being able to live a calling is critical in this regard. The distinction between presence of calling and living a calling is based on the assumption that not everybody is able to find work that matches his or her personal career preferences due to a variety of personal and environmental barriers and constraints that can impede people from realizing their career aspirations and limiting their work volition (Blustein, 2006).

Consequently, research has started to examine living a calling as an important factor to explain how and under which conditions the presence of a calling might yield positive effects. From a theoretical standpoint, living a calling can be seen as a moderator that represents an important boundary condition for the positive effects of the presence of a calling. For example, the importance to distinguish between the presence of a calling and living a calling was supported by a quantitative study showing that presence of calling was only related to career commitment and work meaning under the condition of living a calling (Duffy, Bott, et al., 2012). Other studies have conceptualized living a calling as a mediator that explains by which process the presence of calling exerts positive effects. Specifically, several studies showed that living a calling mediated the relation between presence of calling and life satisfaction (Duffy et al., 2013; Duffy, England, et al., 2017; Duffy, Torrey, England, & Tebbe, 2017).

Other research found additional support for the importance of living a calling. Duffy and colleagues (Duffy et al., 2013; Duffy & Autin, 2013; Duffy, England, et al., 2017) showed that

living a calling, but not presence of calling, was significantly and positively correlated with higher income and educational level. Gazica and Spector (2015) found that academics with unanswered callings scored lower on work engagement, career commitment, job satisfaction as well as self-reported physical and psychological health than study participants who were able to live their callings or even had no callings at all. Finally, Duffy, Douglass, et al. (2016) report that perceiving a calling without the ability to live out the calling is related to decreased levels of life satisfaction. However, these authors also found that living a calling can buffer the negative effects of burnout and exploitation at work on job satisfaction. In sum, these results support the importance of being able to live one's calling for positive individual and organizational outcomes. They also raise the question of what factors allow people to be able to live their calling and how presence of calling is related to actually living it.

Research usually conceptualizes positive work experiences as outcomes of presence of calling and living a calling (Duffy & Dik, 2013). However, more recent work has started to conceptualize living a calling as a feeling that emerges when people are able to engage in fulfilling work and have positive work experiences. Hence, living a calling can be seen as the result of well-being at work and meaningful, satisfying work experiences (Duffy, Allan, Autin, & Douglass, 2014). Along these lines, Duffy and Autin (2013) more closely explored the mechanism linking presence of calling and living a calling and found that positive work experiences in terms of increased work volition and perceived organizational support were significant mediators in this regard. This suggests that people are able to live their calling due to an increased sense of control over their career decision making and because they have a supportive work environment. A longitudinal study of a diverse group of working adults further supported the notion that living a calling should be viewed as an outcome of positive work experiences because career commitment, work meaning, and job satisfaction prospectively predicted living a calling (Duffy et al., 2014). This perspective was further supported in a study by Duffy, Autin, and Douglass (2016) who conceptualized work meaning and career commitment as predictors of living a calling, mediating the effects of vocational privilege (i.e., social class and work volition) on being able to live one's calling. In the present study, we expand on these results and investigate the extent to which job resources are related to the presence of calling and living a calling and might act as a link between these two constructs. This will provide important new knowledge regarding what work context factors allow people with a calling to achieve a state of actually living it.

### **Job Resources as a Link between Having and Living a Calling**

Research investigating presence of calling and living a calling has almost exclusively focused on personal factors, such as occupational identification (Bunderson & Thompson,

2009), career commitment (Duffy, Dik, & Steger, 2011), and career self-efficacy beliefs (Duffy, Allan, & Dik, 2011; Hirschi, 2012). Notable exceptions are the studies by Duffy and Autin (2013) and Allan, Tebbe, Duffy, and Autin (2015), which included organizational support and supportive lesbian, gay, bisexual (LGB) workplace climate, respectively, as predictors of living a calling. However, generally, the consideration of environmental factors and, specifically, the characteristics of the job performed are notably absent from the calling literature. This is an important omission because job resources might play a pivotal role in the experience of living one's calling. Research in organizational psychology has established that work characteristics are critical in order to perceive one's work as meaningful (Humphrey, Nahrgang, & Morgeson, 2007). Work characteristics refer to how "jobs, tasks, and roles are structured, enacted, and modified, as well as the impact of these structures, enactments, and modifications on individual, group, and organizational outcomes" (Grant & Parker, 2009, p. 319). Characteristics such as autonomy, significance, and social support are referred to as *job resources* because they can be regarded as features of one's work that are valued goods in themselves, are functional in achieving work goals, may reduce job demands, and stimulate personal growth and learning (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job resources have been found to be associated with positive outcomes such as job satisfaction, commitment, engagement, motivation, performance, and general well-being (Humphrey et al., 2007). Humphrey and colleagues concluded in their meta-analysis that job resources are strongly associated with experienced meaning, which is, in turn, the most consistent mediator between job resources and positive organizational outcomes. Autonomy, task significance, and social support were among the strongest predictors of meaningfulness, and therefore, they are the focus of our study.

Perceived meaningfulness of work is an important factor of living a calling (Duffy et al., 2013; Duffy et al., 2014; Duffy, Bott, et al., 2012), and job resources should thus facilitate the experience of living a calling. First, autonomy, the degree to which an employee has freedom over work scheduling, decision-making, and work methods, offers the opportunity to actively influence and craft one's job in order to perceive a better fit and to make the job more meaningful (Berg et al., 2010; Demerouti, 2014). Second, task significance, the perception that the job has a positive impact on others, enables employees to experience their work as more purposeful and meaningful (Humphrey et al., 2007). Third, social support, which covers support from coworkers and supervisors as well as friendship opportunities at work, helps to buffer potential stressors at work and is directly linked to a variety of positive outcomes, such as organizational and job commitment (Humphrey et al., 2007; Viswesvaran, Sanchez, & Fisher, 1999). Social relations at work are also an important source of vocational identity because they offer cues in the organizational context of who an employee is at work, of his or

her worth, and of the worth of his or her roles and jobs (Wrzesniewski, Dutton, & Debebe, 2003).

Apart from this link between job resources and living a calling, there is also reason to believe that people with a presence of calling, on average, work in jobs with more resources. Although callings are not restricted to particular professions, research found that people in professional and managerial jobs are more likely to view their work as a calling compared with people in clerical or blue-collar jobs (Peterson, Park, Hall, & Seligman, 2009; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Research found that managerial and professional jobs generally have more job resources in terms of autonomy and are higher in job complexity (Morgeson & Humphrey, 2006). Meta-analytic research also shows that higher job complexity is positively related to job resources such as autonomy and task significance. Moreover, jobs that are high in physical demands (such as blue-collar jobs) generally have lower job resources in terms of autonomy and social support (Humphrey et al., 2007). Hence, there is reason to believe that the presence of a calling and available job resources are not independent and that we can assume that people with a calling are also more likely to work in jobs with more job resources in terms of autonomy, task significance, and social support. However, the relationship between job resources, presence of calling, and living a calling has yet to be empirically explored.

In this study, we empirically test a model that proposes that people are able to transfer their felt calling into actually living their calling by working in jobs with more resources. As such, we position job resources as a mediating mechanism between presence of a calling and living a calling (Figure 1). This theoretical model is in accordance with Duffy and Autin (2013) who have modeled work volition and perceived organizational support as mediators between perceiving a calling and living a calling in an attempt to clarify why people with a calling feel able to live out that calling. We hence test the following:

*Hypothesis 1: The presence of calling is positively correlated with job resources in terms of (a) autonomy, (b) task significance, and (c) social support.*

*Hypothesis 2: Job resources in terms of (a) autonomy, (b) task significance, and (c) social support are positively correlated with living a calling.*

Building on these two hypotheses and the assumptions elaborated above, we further propose that there is an indirect effect from presence of calling to living a calling through increased job resources.

*Hypothesis 3: There are indirect effects from presence of calling on living a calling through increased job resources in terms of (a) autonomy, (b) task significance, and (c) social support.*

Studies among working adults in the U.S. have shown that salary level and educational level are positively related to living a calling (Duffy et al., 2013; Duffy & Autin, 2013). Because these variables can also be expected to be positively related to job resources, we assessed these two variables to be able to estimate their possibly confounding effects on the relationship between the core variables of interest in our study. As an extension, we also measured whether the respondents held leadership positions. Although previous research has not yet empirically addressed the relationship between leadership position and living a calling, it seems possible that employees in a leadership position have more job resources and are also more likely to be living their calling, which could create spurious relations among the examined variables. However, we expect that the proposed relations hold true even when salary, educational level, and leadership position are controlled for.

## Method

### Participants and Procedure

We contacted university alumni ( $N = 735$ ) who had provided their email addresses in previous studies on career development. Participants were invited to complete an online questionnaire; we followed up with two reminder emails to nonresponders, each 10 days apart, resulting in a final response rate of 34% and  $N = 250$ . Participation in a lottery with several prizes of a total value of USD 1,100 was offered as an incentive. In order to examine why perceiving a calling is related to living a calling, it was necessary that study participants endorsed presence of calling at some level. In line with previous research (Duffy et al., 2013; Duffy & Autin, 2013; Duffy, Bott, et al., 2012), we therefore excluded six participants who answered, "not at all true of me" on both presence of calling items (see below). In addition, we excluded 12 people who indicated that they were self-employed because the examined job resources may be qualitatively different for self-employed versus employed workers due to the different work settings. This resulted in a final sample of  $N = 232$ , which was used for all subsequent analyses. The sample was 59% female, with a mean age of 29.25 years ( $SD = 4.85$ ) and work experience of 2.85 years ( $SD = 3.08$ ) after graduation on average. Participants worked in a range of industries, most frequently in business administration (23%), engineering (18%), education (15%), marketing (8%), the computer/software industry (7%), and management (6%).

The participants highest completed educational degree was (1) below a Bachelor's degree, for  $n = 11$ , 4.7%; (2) a Bachelor's degree for  $n = 64$ , 27.6%; (3) a Master's degree for  $n = 147$ , 63.4%; and (4) a doctorate for  $n = 10$ , 4.3%. In terms of *salary* (gross annual income)  $n = 19$  (8.2%); earned less than 10,000 Euros,  $n = 31$  (13.4%) between 10,000 and 19,999 Euros,  $n = 23$  (9.9%) between 20,000 and 29,999 Euros,  $n = 42$  (18.1%) between 30,000 and



39,999 Euros,  $n = 52$  (22.4%) between 40,000 and 49,999 Euros,  $n = 15$  (6.5%) between 50,000 and 59,999 Euros,  $n = 18$  (7.8%) between 60,000 and 69,999 Euros, and  $n = 23$  (9.9%) above 70,000 Euros, with 9 people not indicating their salary. Regarding *leadership position*  $n = 178$  (76.7%) were at the employee level and  $n = 32$  (13.8%) had some kind of leadership position, ranging from group leader to executive board member. Because each leadership level was only named by between three and nine people, we grouped them into one leadership category (22 participants, 9.5%, did not indicate their hierarchical level).

## Measures

Unless stated otherwise, all measures used a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Means, standard deviations, Cronbach's alphas and bivariate correlations among the measures are reported in Table 1.

**Presence of calling.** A German translation (Hirschi, 2011) of the presence subscale of the Brief Calling Scale (BCS; Dik, Eldridge, Steger, & Duffy, 2012) was applied. It consisted of two statements ("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"). A validation study (Dik et al., 2012) found that the BCS positively correlates with other measures of calling and with informants' reports of participants' perceptions of their calling. The original and German language scale showed strong test-retest reliability and significant correlations with constructs such as work engagement, work meaning, career commitment, or job satisfaction (Duffy, Autin, Allan, & Douglass, 2015; Hirschi, 2012; Hirschi & Herrmann, 2013). In a comparison with other calling measures, the BCS is very suitable to assess whether study participants perceive having a calling (Duffy et al., 2015). Pearson correlation for the two items was  $r = .53$  in our sample.

**Living a calling.** We used the six-item (e.g., "I have regular opportunities to live out my calling") Living a Calling Scale (Duffy, Allan, et al., 2012) and a seven-point Likert response format ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale was translated using the independent parallel translation method (van de Vijver & Leung, 1997). The first author of this study and a PhD student in psychology, both very familiar with the construct, native German speakers and highly proficient in English, independently translated the items of the scale into German. The two translations were compared in a review meeting and a final version was conceived after reconsolidating the two translations. This procedure for scale translation is often preferable to a back-translation procedure because it ensures the comprehensibility, connotation, and naturalness of the items (van de Vijver & Leung, 1997). The original scale showed high reliability and significant correlations with life satisfaction, career commitment, work meaning, and job satisfaction (Duffy, Allan, et al., 2012; Duffy, Bott, et al., 2012). Cronbach's alpha for the scale was .96 in our sample.

**Job resources.** We used the German translation (Stegmann et al., 2010) of the Work Design Questionnaire (Morgeson & Humphrey, 2006) to assess decision-making autonomy (six items; e.g., “The job gives me a chance to use my personal initiative or judgment in carrying out the work”), task significance (four items; e.g., “The results of my work are likely to significantly affect the lives of other people”), and social support at work (six items; e.g., “People I work with take a personal interest in me”). The validation study of the German translation of the scale found autonomy, task significance, and social support to correlate positively with job satisfaction, intrinsic work motivation, and meaningfulness (Stegmann et al., 2010). In our sample, Cronbach’s alpha was .90 for autonomy, .84 for task significance, and .78 for social support.

### **Analytical procedure**

We used *Mplus* version 7 (Muthén & Muthén, 1998-2012) to estimate confirmatory factor analyses (CFA) and structural equation models (SEM). In a first step, we tested the data for multivariate normality and found that the data showed significant multivariate skewness and kurtosis, indicating multivariate nonnormality (Cain, Zhang, & Yuan, 2017). To account for this, we estimated all models using the robust maximum likelihood estimation method (MLR) in *Mplus* which estimates parameters with standard errors and a chi-square test statistic that are robust to nonnormality.

Regarding missing data, there were only a few missing values, resulting in a covariance coverage of at least 98.7% for every point in the covariance matrix. Missing data was treated using the full information maximum likelihood (FIML) method. FIML requires less restrictive assumptions of missing at random compared to other procedures such as listwise deletion, which requires missings to be completely at random (Little & Rubin, 2014). Moreover, FIML generally results in less biased estimates compared to other ways of treating missing data (Little & Rubin, 2014). Model fit was assessed with the root mean squared error of approximation (RMSEA), comparative fit index (CFI), and the standardized root mean squared residual (SRMR). Values below .08 for RMSEA, above .95 for CFI, and below .08 for SRMR indicate good model fit (Hu & Bentler, 1999).

Although the standard errors of the indirect effects are trustworthy when using the MLR estimator, for the mediation analyses, we applied 5,000 bootstrap iterations for an additional test of significance (Preacher & Hayes, 2008) and report the 95% bias-corrected bootstrap confidence intervals for the indirect effects. The bootstrapping procedure affects the standard errors and thereby the confidence bounds but not the calculated parameter estimates, which are identical with and without bootstrapping (Preacher & Hayes, 2008).

## Results

### Correlations between Assessed Constructs

Means, standard deviations, and correlations of the study variables are displayed in Table 1. Presence of calling and living a calling were positively related to higher educational levels. Individuals with higher salaries expressed higher levels of living a calling, but not of presence of calling. Furthermore, individuals in leadership positions showed higher levels of living a calling and presence of calling compared with individuals in non-leadership positions. In line with Hypotheses 1 and 2, presence of calling and living a calling were positively associated with autonomy, task significance, and social support at work.

### Mediation Model

Before testing our mediation model, we conducted CFA to examine whether the five scales in fact assess different constructs. In order to rule out the possibility that alternative models show equal or maybe even superior fit to the data, we compared the proposed five-factor solution distinguishing between presence of calling, living a calling, autonomy, task significance, and social support to several alternative models: Specifically, we estimated a one-factor model which would suggest that the assessed constructs cannot be empirically differentiated at all. Next, a two-factor model in which the items for perceiving a calling and living a calling formed one calling factor and the thirteen job resources items loaded on a second factor. This model would suggest that the two calling constructs and the three job resources, respectively, cannot be differentiated. And finally, a three-factor model in which the two items of perceiving a calling, the five items of living a calling, and the thirteen job resources items formed a factor, which would suggest that while there are different assessments of calling (i.e., presence and living) the three job resources cannot be distinguished empirically. The results showed that the theoretically proposed five-factor solution fitted the data well ( $\chi^2 = 242.17$ ,  $df = 160$ ,  $CFI = .97$ ,  $RMSEA = .05$ ,  $SRMR = .06$ ) and significantly better than all other models (Satorra-Bentler corrected chi-square difference tests for all comparisons were significant at  $p < .001$ ). We obtained the same results when we included the control variables educational level and leadership position in the CFAs, as we did in the subsequent SEM testing.

We estimated the SEM using presence of calling as a predictor of the three job resources and living a calling. Additionally, living a calling was regressed on the three job resources (Figure 1). Based on the findings (Table 1) that educational level and leadership position (but not salary) were related to both the presence of calling and living a calling, we included educational level and leadership position as predictors of for all five latent variables in the model to rule out confounding effects. The model fit indicated good fit between the

proposed model and the data ( $\chi^2 = 268.49$ ,  $df = 190$ ,  $CFI = .97$ ,  $RMSEA = .05$ ,  $SRMR = .05$ ). The two control variables education and leadership position were significantly related to the three mediators but not to presence of calling and living a calling. Education positively related to autonomy ( $b = .16$ ,  $SE = .08$ ,  $\beta = .13$ ,  $p < .05$ ), task significance ( $b = .28$ ,  $SE = .09$ ,  $\beta = .19$ ,  $p < .01$ ), and social support ( $b = .19$ ,  $SE = .09$ ,  $\beta = .16$ ,  $p < .05$ ). Leadership position positively related to autonomy ( $b = .45$ ,  $SE = .14$ ,  $\beta = .19$ ,  $p < .01$ ) and negatively to social support ( $b = -.55$ ,  $SE = .17$ ,  $\beta = -.25$ ,  $p < .01$ ).

Presence of calling was positively related to all three job resources (for autonomy:  $b = .31$ ,  $SE = .13$ ,  $\beta = .19$ ,  $p < .01$ ; for task significance:  $b = .67$ ,  $SE = .15$ ,  $\beta = .35$ ,  $p < .001$ ; for social support:  $b = .41$ ,  $SE = .16$ ,  $\beta = .27$ ,  $p < .001$ ), fully supporting Hypothesis 1. In turn, autonomy ( $b = .67$ ,  $SE = .13$ ,  $\beta = .36$ ,  $p < .001$ ) and task significance ( $b = .47$ ,  $SE = .13$ ,  $\beta = .30$ ,  $p < .001$ ) were positively related to living a calling, but social support was not ( $b = .05$ ,  $SE = .16$ ,  $\beta = .02$ ,  $p = .77$ ). These results support Hypotheses 2a and 2b but not Hypothesis 2c. The direct path from presence of calling to living a calling remained significant even after including the effects of the three job resources in the model ( $b = .91$ ,  $SE = .22$ ,  $\beta = .30$ ,  $p < .01$ ). Bootstrap analyses (Table 2) revealed significant indirect effects of presence of calling on living a calling via autonomy and task significance but not social support. These results support Hypotheses 3a and 3b but failed to support Hypothesis 3c.

Because we examined cross-sectional data, it is possible that alternative models to the one theoretically proposed herein might fit the data equally well. Specifically, it might be that job resources increase presence of a calling which in turn promotes the sense of living a calling. In an attempt to rule out this alternative explanation of our data, we compared the proposed model (presence of calling predicting job resources which predicted living a calling) with the alternative model where job resources predicted the presence of a calling, which in turn predicted living a calling. The proposed model showed a significant better fit than the alternative model (model fit alternative model:  $\chi^2 = 316.48$ ,  $df = 193$ ,  $CFI = .95$ ,  $RMSEA = .05$ ,  $SRMR = .06$ ; SB-corrected  $\Delta\chi^2 = 59.83$ ,  $\Delta df = 3$ ,  $p < .001$ ), which supports the herein assumed theoretical linkages among the examined constructs.

## Discussion

The major goal of the present study was to investigate what conditions facilitate that the presence of calling can lead to a state of actually living it. Although previous calling research investigated a range of personal characteristics as predictors of presence of calling, such as self-efficacy beliefs and work volition (Duffy & Dik, 2013), the potentially important role of the work environment for the understanding of the emergence and functioning of callings

has been largely neglected. Our investigation extends previous research by focusing on the critical role of job resources in explaining the linkage between having and living a calling.

### **Calling, Salary, Education, and Leadership Position**

In the first set of analyses, we were able to replicate and extend previous findings among U.S. workers that salary was related to living a calling but not to the presence of calling (e.g., Duffy, England, et al., 2017). Duffy and colleagues (Duffy et al., 2013; Duffy & Autin, 2013; Duffy, England, et al., 2017) assumed that differences in household and personal income regarding living a calling imply that the ability to live one's calling might be impacted by one's socio-economic class and the access to opportunity to pursue a desired career path. Our results extend these findings and suggest that the relation between salary and living a calling might also be due to the observation that people who work in jobs with more job resources are also more likely to be living their callings. Resource-rich jobs, on average, also pay higher salaries (Ng & Feldman, 2014). As such, the positive relation between salary and living a calling might be a reflection of the type of jobs people who live their callings retain.

In contrast to the findings of Duffy et al. (Duffy et al., 2013; Duffy & Autin, 2013), we found that higher levels of completed education were positively related not only to living a calling but also to the presence of calling in our sample. In the same vein, our study extends previous research by showing that employees in leadership positions more strongly felt a presence of calling and were more likely to be able to live it. These findings are in line with research that suggests that seeing one's job as a calling is more prevalent among professional and managerial jobs compared with clerical or blue-collar jobs (Peterson et al., 2009; Wrzesniewski et al., 1997) and that social class is positively related to living a calling (Duffy, Autin, et al., 2016). Our results support the notion that having and living a calling might entail a certain degree of privilege. This stresses the importance of future research to more generally examine how aspects of vocational privilege impact the possibility of individuals to have fulfilling work experiences (Blustein, 2008; Duffy, Blustein, Diemer, & Autin, 2016).

### **Job Resources and Calling**

The most important contribution of our study is that we were able to show how job resources might explain individual differences in presence of calling, in living a calling, and in the relation between the two constructs. Based on work characteristics research (Humphrey et al., 2007), we proposed that job resources such as autonomy, task significance, and social support at work are important explanatory variables in this regard. Previous research has repeatedly established these factors' important role in increasing employees' perceived work meaningfulness, job satisfaction, and general well-being (Humphrey et al., 2007). By integrating the research on job resources with the calling literature, our study provides new

insights regarding the questions of why people with a calling are able to live it. We showed that people who more strongly endorse a calling are, on average, also more likely to work in jobs with more job resources. We interpret this finding based on the results reported above that presence of calling entails a certain degree of privilege in terms of leadership position and education. Working in a job with more job resources also manifests this privilege. Our results further showed that living a calling was positively related to the level of job resources in one's present job. This supports our assumption that one reason why people are able to live their callings is because they work in jobs that provide them with autonomy, task significance, and social support. Job resources of autonomy and task significance were in turn significant mediators of the effects of presence of calling on living a calling. Because job resources can enhance meaning at work, our results are in line with Duffy et al. (Duffy et al., 2013; Duffy, Bott, et al., 2012), who found significant correlations between work meaningfulness and living a calling.

Contrary to our assumption, there were no significant specific indirect effects of social support at work because social support was not significantly related to living a calling once the other two job resources were controlled for. This finding is somewhat contrary to the result of Duffy and Autin (2013), who found that perceived organizational support mediated the effects of presence of calling on living a calling. However, perceived social support at work and perceived organizational support are distinct constructs, with the former referring to job resources in the imminent work environment, while the latter refers to a more general perception about the organization. Our results hence suggest that social support at work does not play a major role in regard to being able to live one's calling, despite its importance in explaining individual differences in organizational outcomes such as job satisfaction or work engagement (Humphrey et al., 2007). This may be because social support at work is more a characteristic of the work environment, with the primary function of receiving help to fulfill one's job, and less a characteristic of the job as such. Apparently, characteristics of the job in terms of autonomy and task significance are more important for understanding individual differences in presence of calling and living a calling than environmental factors, such as social support at work.

In sum, our results suggest that having autonomy at work and fulfilling tasks that are meaningful contributes to being able to live one's calling, independent of a person's hierarchical level and educational level, which were controlled in the analyses. Because we also controlled for the direct effects of presence of calling on living a calling, the results also mean that independent of the degree to which someone perceives a calling, job resources such as autonomy and task significance enhance being able to live a calling. This suggests important avenues for individuals and organizations interested in reaping the benefits of

callings at work that have not been considered in the extant calling research. Previous studies on living a calling (Duffy, Allan, et al., 2012; Duffy & Autin, 2013) have stressed mostly the importance of finding the right job in terms of matching one's calling. Our results suggest that individuals and organizations should also pay attention to the types of jobs that people perform and strive for working environments rich in job resources that augment the chance of being able to live one's calling. We encourage future research to more closely explore how different work experiences, including aspects that this study did not consider such as job demands, interdependence of work, or feedback from others, can increase the sense of living a calling.

### **Limitations**

The first limitation of this study is that all measures were obtained through self-reports and at one point in time. Self-reports are appropriate to assess the variables of interest in this study because they focus on the subjective perception of participants. Nonetheless, our study design might have caused common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) that might have influenced the observed relations between the variables of interest. Aware of this limitation, we took several a priori steps to minimize common method bias, including providing clear and easy-to-understand instructions and scale items, stressing the importance of the study to participants, randomizing the scales and item order within scales, and testing a one-factorial model against the theoretical model with CFA.

Second, the cross-sectional nature of the study does not permit any causal inferences. A recent longitudinal study with a cross-lagged design (Duffy et al., 2014) showed that positive work experiences should be regarded as predictors of living a calling. Our proposed model, which sees living a calling as an outcome of a positive work environment, is in line with these findings. We also established that the proposed model fitted our data better than a plausible alternative model. However, cross-sectional studies do not allow a strict test of directionality of the proposed effects as other theoretical models to explain how the variables in this study are related are possibly also valid. For example, job resources might lead to perceiving a calling for one's job through cumulative effects over time. It is also possible that living a calling could lead employees to increase their job resources over time through job crafting behaviors (Demerouti, 2014). Moreover, a cross-sectional study cannot control for autoregressive effects that account for prior levels of the dependent variables. This omission might lead to upward-biased estimates of the relation among the variables in the model (Cole & Maxwell, 2003). Multi-wave longitudinal studies would be needed to overcome these limitations and shed more light on the true causal relationships between our study variables. A related issue is that we have modeled job resources as mediators, linking the presence of a calling and living a calling. This approach is consistent with Duffy and Autin's (2013) reasoning. Building our model in line

with prior work allows for comparisons across studies which should ultimately contribute to greater scientific progress in the research on calling. However, arguments can be made that job resources could also function as a moderator, indicating the conditions under which the presence of a calling is related to living a calling. However, as we have theorized and supported with our data, the presence of calling, living a calling, and job resources are theoretically and empirically not independent from each other and conceptualizing job resources as a linking mechanism thus seems theoretically and empirically justified.

A third limitation is that our sample was generally highly educated and rather homogeneous in terms of age. This limits the possible variance in salary, education, and job resources, when compared with a general working population. It is hence important that similar studies are conducted with other groups, including a wider age range and educational backgrounds. Moreover, our analyses were restricted to people who experienced a calling at least at some minimal level. Therefore, our findings cannot be generalized to people who perceive no presence of calling.

### **Implications for Practice**

Our study extends the calling literature by focusing on job resources in relation to presence of calling and living a calling, thereby providing a previously neglected perspective on this issue. Our results help to increase our understanding what factors help people to move from having a calling to actually living it. For individuals who feel a presence of calling and for career counselors working with such clients, our results suggest that living one's calling is not simply a matter of finding the right match in terms of occupation. As we showed, the characteristics of one's present job also seem to play an important role. If people work in jobs that provide them with autonomy and tasks that are perceived as significant, this can significantly enhance their ability of being able to live their callings. Job-crafting activities (Demerouti, 2014) might help employees to create work conditions and shape their jobs in a way that increases these job resources and thus allows them to better live their calling. Career counselors can help clients identify areas in which job crafting is possible and beneficial and assist clients in planning and executing job-crafting activities. For organizations, providing autonomy and task significance through job redesign could be a valuable way to help employees with a calling to be better able to live it. Finally, because our study confirms the notion that being able to live one's calling entails a certain privilege in terms of education, income, and leadership position, considering the role that social privilege plays in being able to live a calling seems important. Based on the psychology of working theory (Blustein, 2006; Duffy, Blustein, et al., 2016), helping clients who are marginalized and suffer from economic constraints to increase their work volition and career adaptability resources would be promising



avenues to facilitate access to more meaningful work. In addition, counselors could work with clients to raise their critical consciousness (Chronister & McWhirter, 2006) and develop strategies on how to overcome barriers for their vocational development.

### **Conclusions**

Our study introduced the importance of job resources to better understand how people can be living their callings. In contrast to extant calling research that predominately focused on individual factors, we were able to show that the work context and the specific characteristics of the job performed are important to better understand how the presence of a calling can be transformed into actually living a calling. We hope that this insight will stimulate future calling research as well as new avenues for practice that help individuals live their callings by taking into account the importance of the work context.

## References

- Allan, B. A., Tebbe, E. A., Duffy, R. D., & Autin, K. L. (2015). Living a calling, life satisfaction, and workplace climate among a lesbian, gay, and bisexual population. *Career Development Quarterly, 63*(4), 306-319. doi: 10.1002/cdq.12030
- Berg, J. M., Grant, A. M., & Johnson, V. (2010). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings. *Organization Science, 21*(5), 973-994. doi: 10.1287/orsc.1090.0497
- Blustein, D. L. (2006). *The psychology of working : a new perspective for career development, counseling, and public policy*. Mahwah, NJ: Lawrence Erlbaum Publishers.
- Blustein, D. L. (2008). The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist, 63*(4), 228-240.
- Bunderson, J. S., & Thompson, J. A. (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly, 54*(1), 32-57. doi: 10.2189/asqu.2009.54.1.32
- Cain, M. K., Zhang, Z. Y., & Yuan, K. H. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior Research Methods, 49*(5), 1716-1735. doi: 10.3758/s13428-016-0814-1
- Chronister, K. M., & McWhirter, E. H. (2006). An experimental examination of two career interventions for battered women. *Journal of Counseling Psychology, 53*(2), 151-164. doi: 10.1037/0022-0167.53.2.151
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112*(3), 558-577.
- Demerouti, E. (2014). Design your own job through job crafting. *European Psychologist, 19*(4), 237-247. doi: 10.1027/1016-9040/a000188
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512. doi: 10.1037/0021-9010.86.3.499
- Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist, 37*(3), 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*(3), 242-263. doi: 10.1177/1069072711434410
- 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*(1), 42-52. 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*(4), 605-615. doi: 10.1037/cou0000042

- Duffy, R. D., Allan, B. A., & Bott, E. M. (2012). Calling and life satisfaction among undergraduate students: Investigating mediators and moderators. *Journal of Happiness Studies*, *13*(3), 469-479. doi: 10.1007/s10902-011-9274-6
- Duffy, R. D., Allan, B. A., & Dik, B. J. (2011). The presence of a calling and academic satisfaction: Examining potential mediators. *Journal of Vocational Behavior*, *79*(1), 74-80. doi: 10.1016/j.jvb.2010.11.001
- Duffy, R. D., & Autin, K. L. (2013). Disentangling the link between perceiving a calling and living a calling. *Journal of Counseling Psychology*, *60*(2), 219-227. 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*(3), 351-366. doi: 10.1177/1069072714547163
- Duffy, R. D., Autin, K. L., & Douglass, R. P. (2016). Examining how aspects of vocational privilege relate to living a calling. *Journal of Positive Psychology*, *11*(4), 416-427. doi: 10.1080/17439760.2015.1092570
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, *63*(2), 127-148. doi: 10.1037/cou0000140
- 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*(1), 50-59. doi: 10.1037/a0026129
- Duffy, R. D., & Dik, B. J. (2013). Research on calling: What have we learned and where are we going? *Journal of Vocational Behavior*, *83*(3), 428-436. doi: 10.1016/J.Jvb.2013.06.006
- Duffy, R. D., Dik, B. J., & Steger, M. F. (2011). Calling and work-related outcomes: Career commitment as a mediator. *Journal of Vocational Behavior*, *78*(2), 210-218. doi: 10.1016/j.jvb.2010.09.013
- Duffy, R. D., Douglass, R. P., Autin, K. L., England, J., & Dik, B. J. (2016). Does the dark side of a calling exist? Examining potential negative effects. *Journal of Positive Psychology*, *11*(6), 634-646. doi: 10.1080/17439760.2015.1137626
- Duffy, R. D., England, J. W., Douglass, R. P., Autin, K. L., & Allan, B. A. (2017). Perceiving a calling and well-being: Motivation and access to opportunity as moderators. *Journal of Vocational Behavior*, *98*, 127-137. doi: 10.1016/j.jvb.2016.11.003
- Duffy, R. D., Torrey, C. L., England, J., & Tebbe, E. A. (2017). Calling in retirement: A mixed methods study. *Journal of Positive Psychology*, *12*(4), 399-413. doi: 10.1080/17439760.2016.1187201
- Gazica, M. W., & Spector, P. E. (2015). A comparison of individuals with unanswered callings to those with no calling at all. *Journal of Vocational Behavior*, *91*, 1-10. doi: 10.1016/j.jvb.2015.08.008
- Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *The Academy of Management Annals*, *3*(1), 317-375. doi: 10.1080/19416520903047327
- Hirschi, A. (2011). Callings in career: A typological approach to essential and optional components. *Journal of Vocational Behavior*, *79*(1), 60-73. doi: 10.1016/j.jvb.2010.11.002

- Hirschi, A. (2012). Callings and work engagement: Moderated mediation model of work meaningfulness, occupational identity, and occupational self-efficacy. *Journal of Counseling Psychology, 59*(3), 479-485. doi: 10.1037/A0028949
- Hirschi, A., & Herrmann, A. (2013). Calling and career preparation: Investigating developmental patterns and temporal precedence. *Journal of Vocational Behavior, 83*(1), 51-60. doi: 10.1016/j.jvb.2013.02.008
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55. doi: 10.1080/10705519909540118
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92*(5), 1332-1356. doi: 10.1037/0021-9010.92.5.1332
- Little, R. J. A., & Rubin, D. B. (2014). *Statistical analysis with missing data*. Hoboken, NJ: Wiley.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91*(6), 1321-1339. doi: 10.1037/0021-9010.91.6.1321
- Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide*. (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Ng, T. W. H., & Feldman, D. C. (2014). A conservation of resources perspective on career hurdles and salary attainment. *Journal of Vocational Behavior, 85*(1), 156-168. doi: 10.1016/j.jvb.2014.05.008
- Peterson, C., Park, N., Hall, N., & Seligman, M. E. P. (2009). Zest and work. *Journal of Organizational Behavior, 30*(2), 161-172. doi: 10.1002/job.584
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi: 10.1037/0021-9010.88.5.879
- Preacher, K., & Hayes, A. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891. doi: 10.3758/brm.40.3.879
- Stegmann, S., van Dick, R., Ullrich, J., Charalambous, J., Menzel, B., Egold, N., & Tai-Chi Wu, T. (2010). Der Work Design Questionnaire. Vorstellung und erste Validierung einer deutschen Version [The Work Design Questionnaire-Introduction and validation of a German version]. *Zeitschrift für Arbeits- und Organisationspsychologie, 54*(1), 1-28. doi: 10.1026/0932-4089/a000002
- van de Vijver, F. J., & Leung, K. (1997). *Methods and data analysis for cross-cultural research* (Vol. 1). Thousand Oaks, CA: Sage.
- Viswesvaran, C., Sanchez, J., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54*, 314-334. doi: 10.1006/jvbe.1998.1661

- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. *Research in Organizational Behavior, 25*, 93-135. doi: 10.1016/S0191-3085(03)25003-6
- 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*(1), 21-33. doi: 10.1006/jrpe.1997.2162

Table 1

*Means, Standard Deviations, Cronbach's Alphas, and Pearson's Correlations for the Study Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Educational level	2.67	.63	-						
2 Leadership position	1.15	.36	.04	-					
3 Salary	4.39	2.04	.31***	.13	-				
4 Autonomy	3.73	.92	.10	.21**	.31***	-			
5 Task significance	3.28	.90	.20**	.11	.05	.27***	-		
6 Social support at work	3.94	.64	.16**	-.17**	.11	.35***	.27***	-	
7 Presence of calling	3.55	.78	.12*	.19**	-.01	.17**	.31***	.12*	-
8 Living a calling	4.40	1.46	.13*	.17**	.21**	.51***	.48***	.28***	.43***

*Note.*  $N = 232$ .  $N = 210$  for a leadership position (no = 0; yes = 1);  $N = 223$  for salary.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (one sided).

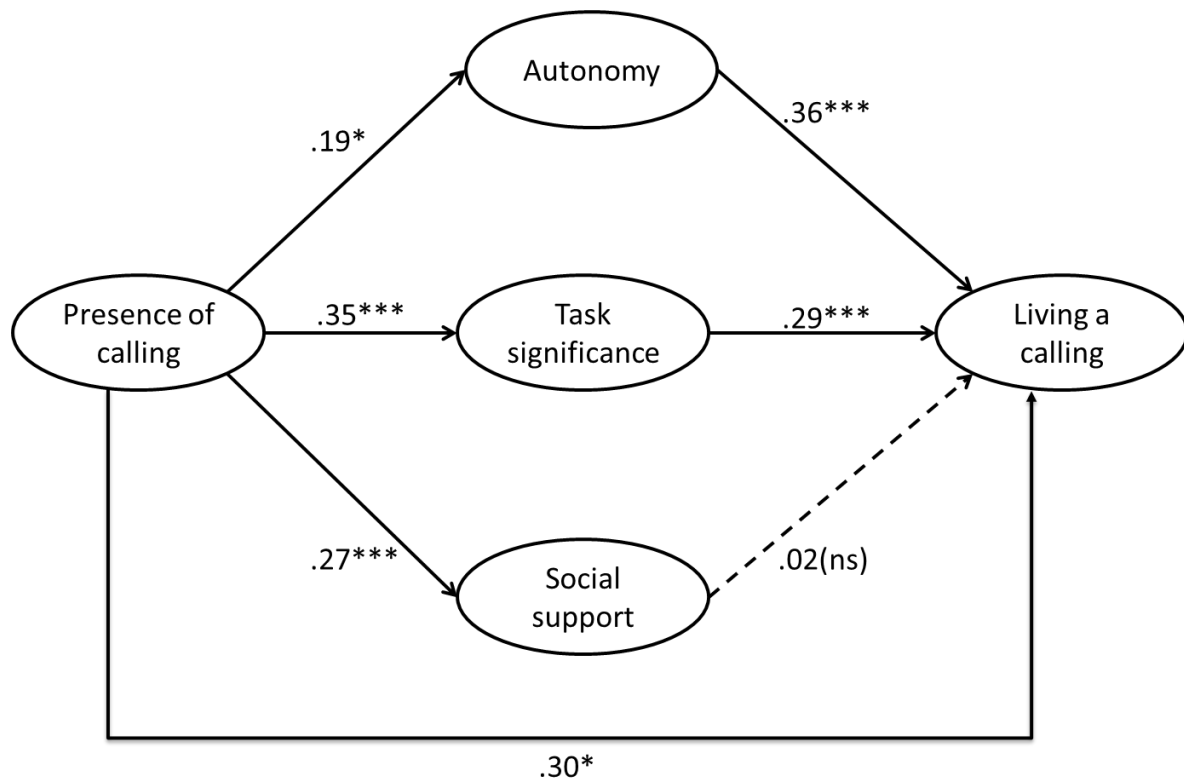
Table 2

*Standardized Parameters of Indirect Effects, Standard Errors, and Confidence Intervals*

	Specific indirect	Sum of indirect	S.E.	95% CI
Presence of calling – Living a calling		.18**	.04	.09 – .27
Autonomy	.07*		.03	.01 – .13
Task significance	.11**		.03	.04 – .16
Social support	.01		.02	-.04 – .05

*Note.*  $N = 232$ . Confidence intervals are based on bootstrapping analysis using ML estimator.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$



*Figure 1.* Results of the structural equation model testing the effects of presence of calling on job resources (autonomy, task significance, and social support) and living a calling. The model controls for leadership position and educational level (not shown in figure). Each construct was represented by its respective items (not shown). The path diagram shows significant standardized parameters ( $N = 232$ ).

\*  $p < .05$ ; \*\*\*  $p < .001$ .