

THESIS

CALLING IN THE UNITED STATES:
PREVALENCE AND THE ROLE OF SOURCE

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ABSTRACT

CALLING IN THE UNITED STATES: PREVALENCE AND THE ROLE OF SOURCE

Research on calling as a construct in vocational psychology has grown substantially in the past decade. However, questions pertaining to the prevalence of calling and role of source of calling remain unanswered. The present study used data from Wave 2 of the Portraits of American Life Study: a nationally stratified panel study of religion in the United States. Part One of this study sought to estimate the prevalence of calling in the United States while Part Two investigated whether or not participants' source of calling affected relationships between living a calling, job satisfaction, and well-being correlates. In general, estimates in this study suggest that calling is a relevant concept for many adults throughout the United States, with significant differences in presence of and search for calling being found for age, employment status, and the importance of God or spirituality. Additionally, results demonstrated that source of calling moderated the relationship between living a calling and job satisfaction such that, for those citing an external source of calling, living a calling was not predictive of job satisfaction. Furthermore, importance of God or spirituality was found to be an important predictor of living a calling, purpose in life, and hope for the future. These findings represent the first known population estimates of calling in the United States and extend the existing literature on calling by providing further information pertaining to the relative importance of source of calling and spirituality in predicting relevant work and well-being outcomes.

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CHAPTER I

Introduction

In contemporary culture it is not uncommon to hear a person refer to her or his calling when talking about a career. Many people report that they have a calling in the context of their work. In fact, research with university student (e.g., Duffy & Sedlacek, 2010) and working (e.g., Duffy, Allan, Autin, & Bott, 2013) populations has found that roughly 43-45% of people feel that it is mostly or totally true that they have a calling to a particular kind of work. It also appears that, rather than viewing work simply as a means of obtaining income, many experience, or are seeking, greater meaning in life as a result of their work (Steger & Dik, 2009). While the topic of calling has long been an area of discourse in the fields of religion and philosophy, calling as a construct has only recently received attention in psychological research. In fact, a recent (February, 2018) search of “calling” and “work,” “career,” or “vocation” in the PsycInfo database yielded 21 relevant studies published prior to 2007 and 161 relevant studies published since 2007. Research on calling has sought to clarify its definition (e.g., Dik & Duffy, 2007; Elangovan, Pinder, & McLean, 2010), develop scales to measure it in a quantitative fashion (e.g., Dik, Eldridge, Steger, & Duffy, 2012; Dobrow & Tosti-Kharas, 2011; Praskova, Creed, & Hood, 2015), calculate descriptive statistics to establish its prevalence (Duffy & Sedlacek, 2010), and investigate its correlates and consequences in work and life (e.g., Duffy, Allan, & Dik, 2011; Duffy, Allan et al., 2013, Steger, Pickering, Shin, & Dik, 2010). However, research in this area remains young and further study is required to address gaps in the literature (Duffy & Dik, 2013).

Although there is no consensus on how a calling is defined, scholars often describe it as an approach to one's career or work marked by a deep sense of meaning, often prompted by an internal drive and/or external summons to use one's gifts in a prosocial manner. Though calling is a construct that might be experienced in many life domains or roles (e.g., Hunter, Dik, & Banning, 2010), the bulk of the research on calling has focused on how it relates to career development. Research on calling within this domain has shown that a sense of calling correlates positively with many different work outcomes such as job satisfaction (e.g., Davidson & Caddell, 1994; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997; Duffy, Allan et al., 2011) and career and organizational commitment (e.g., Duffy, Bott, Allan, Torrey, & Dik, 2012; Duffy, Allan et al., 2013; Cardador, Dane, & Pratt, 2011). Indeed, calling's relation to positive work outcomes highlights the need to better understand the overall prevalence of calling as well as its antecedents.

Though many studies of calling have been conducted within the United States, calling has recently been studied in a growing number of countries and populations such as Australia (e.g., Praskova, Creed & Hood, 2015), Canada (e.g., Domene, 2012), China (e.g., Zhang, Dik, Wei & Zhang, 2015; Zhang, Hirschi, Hermann, Wei & Zhang, 2016), India (e.g., Douglass, Duffy & Autin, 2015), Romania (e.g., Dumulescu, Opre, & Ramona, 2015), and South Africa (e.g., van Zyl, Deacon, & Rothmann, 2010). One shortcoming of these studies is that they are often convenience samples, and many are regionally isolated. The present study used data gathered from the Portraits of American Life Study (PALS), a multi-level panel study of adults in the United States focusing on religion and other topics. The PALS project placed an emphasis on capturing ethnic and racial diversity (Emerson, Sikkink, & James, 2010). This sample is nationally representative and offers a definitive look at the overall prevalence of calling in the

continental United States. In addition to overall prevalence, researchers investigating calling are only beginning to understand possible antecedents to this approach to work as well as how a person's source of calling may affect her or his lived experience of that calling. This study used data from the PALS to examine the extent to which the source of one's calling (external, internal, or both) influences the relationship between living a calling and job satisfaction and well-being correlates.

Defining Calling

Early discussions of calling in relation to work began in a religious context. Reformers such as Martin Luther and John Calvin valued the idea that the full range of diverse work roles could be spiritually significant (Hardy, 1990). More recent debates about the definition of calling have surfaced within vocational psychology, organizational behavior, and management. Overall, definitions of calling in the social sciences can be roughly categorized as "neoclassical" or "modern" (Bunderson & Thompson, 2009). Neoclassical definitions of calling derive from the way calling has been understood historically. These definitions emphasize calling as part of one's destiny or as an external summons; they also maintain an emphasis on prosocial duty. Unlike neoclassical definitions, Bunderson and Thompson (2009) argued that modern definitions of calling tend to be more self-focused and see calling as a means of achieving self-actualization or personal happiness.

While scholars remain divided in terms of their own conceptualization of the term, researchers have also polled participants to see how calling is defined by those that are seeking or experiencing one. Hirschi (2011) found that research participants also have different understandings of what calling means. In this study, a cluster analysis of German undergraduate student participants who thought of their careers as a calling revealed three distinct but

overlapping groups: “negative career self-centered” (i.e., students who pursue a career primarily for self-enhancement but who also have negative self-evaluations), “pro-social religious” (i.e., students whose callings have religious connotations and are motivated by pro-social intentions), and “positive varied work orientation” (i.e., students who viewed their work and themselves positively but did not have a homogenous set of work values). From this study, Hirschi concluded that calling is marked by high levels of vocational identity (via self-exploration and commitment) which promotes confidence in and engagement with one’s career. Other studies have used qualitative strategies to collect participants’ own personal definitions of calling using interviews or written responses. For example, Hunter, Dik, and Banning (2010) examined open-ended responses to questions concerning the definition of calling. This analysis found themes of a guiding force, personal fit and eudemonic well-being, and altruism to be relevant in participants’ definitions of calling, which closely fit with the definition proposed by Dik and Duffy (2009). Similarly, Hagmeier and Abele (2012) asked participants to define calling. Using a grounded theory approach, researchers found that categories of “transcendent guiding force, identification and person-environment fit, and meaning and value-driven behavior” described the vast majority of the participants’ responses. Zhang, Dik, Wei, and Zhang’s (2015) qualitative study found largely similar results among Chinese college students, though “sense of duty” was more prevalent among these participants relative to Western populations. Another study of eight counseling psychologists who viewed their career as a calling found that participants defined their callings as being synonymous with their purpose in life. They also described a calling as something that changes and develops over time (Duffy, Foley et al., 2012).

While several definitions of calling are currently in use in the literature, this study adopted the definition produced by Dik and Duffy (2009). In their conceptual paper, they

reviewed a broad range of definitions of calling from social sciences and humanities literature and arrived at a definition of calling in one's work containing three components: an external or transcendent summons, a source of purpose/meaning, and a prosocial motivation. An external summons is identified as the perception that one's calling originates outside of oneself. Duffy and Dik (2013) suggested that possible external sources of calling might include a higher power, societal need, family, friends, and country, among others. The second component of this definition, aligning with one's purpose, is the idea that one's calling is either an expression of one's life purpose or a source from which it emanates. The third and final component of Dik and Duffy's definition is prosocial motivation, which is the idea that one's calling in work includes a motivation to serve others and advance the "greater good" of society. This definition of calling differentiates the construct from other career-related constructs such as work engagement (which describes the degree to which individuals employ their personal selves in their work; Kahn, 1990), meaningful work (which may not necessarily involve a transcendent summons or prosocial motivation in deriving meaning from work; Rosso, Dekas, & Wrzesniewski, 2010), and prosocial work behaviors (which describes how work may motivate individuals to make a positive difference in others' lives; Grant, 2007).

Dik and Duffy (2009) also described calling as a continuous dimension that people may experience to varying extents (i.e., calling is not something that one simply does or does not have). Calling can also be thought of as an ongoing process rather than a static state that one discovers or achieves once and for all. Duffy, Bott et al. (2012) also noted that it is important to distinguish between perceiving a calling and living a calling. For an individual to be living a calling, he or she must perceive a calling. However, individuals who perceive a calling may or may not be living their calling for any number of reasons. Furthermore, this research showed

that perceiving a calling may only be linked to work meaning, career commitment, and job satisfaction when individuals perceiving a calling also report that they are living that calling. This illuminates the importance of differentiating between perceiving and living a calling in that living a calling is a key mechanism linking a person's perception of a calling to positive career outcomes. Dik and Duffy's (2009) conceptualization of calling has informed the way in which calling is assessed in various populations. The Calling and Vocation Questionnaire (CVQ) and the Brief Calling Scale (BCS) both assess for the presence of calling (Dik, Eldridge et al., 2012). Duffy, Autin, Allan, and Douglass (2015) found that the CVQ and BCS (along with other measures) were reliable across time and useful in predicting work meaning, career commitment, and job satisfaction. These instruments also compared favorably to other instruments in predicting face valid measures of calling.

Calling and Work-Related Outcomes

While definitional issues concerning calling have received attention, the bulk of the research on calling has examined its relation to other work-related and well-being outcome variables. Some of this research has focused on the degree to which calling relates to aspects of career maturity (i.e., an individual's career progress relative to that individual's stage of career development; Crites, 1976). For example, Hirschi and Hermann (2013) researched aspects of career maturity in German university students (N = 846). They found that perceiving a calling was significantly related to aspects of career preparation (planning and decidedness) and career self-efficacy over three time points. Earlier studies by these researchers found that calling was positively correlated with stronger vocational identity (Hirschi & Hermann, 2012). Other studies have found perceiving a calling to be strongly correlated with vocational self-clarity, comfort

with one's career choice, and career decidedness (Duffy & Sedlacek, 2007; Steger et al., 2010; Hirschi & Hermann, 2013).

Beyond aspects of career maturity, a sense of calling has been linked to several other work-related criterion variables, including those that may be seen as beneficial to both individuals who experience calling as well as employers. For example, the presence of calling has been found to be significantly related to greater career commitment and organizational commitment, and to lower withdrawal intentions, with career commitment serving as a mediator between calling and the two other criterion variables (Duffy, Allan, & Dik, 2011). The relationship of calling with career and organizational commitment has been replicated in several studies (e.g., Duffy, Bott et al., 2012; Duffy, Allan et al., 2013; Cardador et al., 2011). Similarly, Hirschi (2012) found, among German university students, links between calling and work meaningfulness, occupational identity, occupational self-efficacy, work engagement, and person–job fit. This research suggests that individuals who feel they have a calling may experience more meaning in their careers and greater commitment to their work, which likely benefits organizations as organizational commitment is increased and withdrawal intentions are reduced.

Recent longitudinal research has further explored the role of calling in positive work outcomes by investigating the degree to which calling may be an antecedent or consequence of these outcomes. Praskova, Hood and Creed (2014), using a sample of Australian young adults, found that measures of calling at Time One predicted work effort, career strategies (i.e., self-reported work involvement, seeking career guidance, creating career opportunities, and self-presentation), and career adaptability at a six-month follow-up. This supports the idea that calling may be an antecedent to positive work outcomes. Conversely, longitudinal research by

Duffy, Allan, Autin, and Douglass (2014) found that positive work outcomes significantly predicted living a calling. Despite initially testing for the reverse, they reported that the best-supported model included career commitment, work meaning, and job satisfaction as significant predictors of living a calling across three time points during a six-month period. Beyond the fact that these two studies used two different sets of work outcomes, the directionality of the relationships between calling and work outcomes remains unclear. Regardless of the directionality of these relationships, it is clear that calling relates to many different positive work outcomes that may benefit both individuals and the organizations for which they work.

Another area of outcomes to which a sense of calling has been linked is domain satisfaction. A large portion of the research on calling has been conducted on university campuses, making academic satisfaction a natural area of study. Duffy, Allan et al. (2011) found that perceiving a calling correlated moderately with academic satisfaction, a relationship that was fully mediated by career decision self-efficacy and work hope. Beyond college student career decision-making, research has shown that calling is related to job satisfaction for those who are currently in the workforce. Studies have shown that those who perceive their job as a calling report more satisfaction from their work than those who view their employment as a job (i.e., a focus on financial rewards and necessity) or career (i.e., a focus on advancement in the workplace; Davidson & Caddell, 1994; Wrzesniewski et al., 1997). Later research, using diverse measurement strategies, has corroborated this finding (Duffy, Allan et al., 2011; Duffy, Allan et al., 2013; Duffy, Allan, Bott, & Dik, 2014; Hagmaier & Abele, 2012; Harzer & Ruch, 2012; Peterson, Park, Hall, & Seligman, 2009; Xie, Xia, Xin, & Zhou, 2016). Research has attempted to explain this relationship, finding that career commitment and work meaning may mediate the relationship between calling and job satisfaction (Duffy, Allan et al., 2011; Duffy, Bott et al.,

2012). Alternatively, Xie et al. (2016) found career adaptability to mediate this relationship. Further research may continue to illuminate the specific aspects of calling that predict greater job satisfaction.

Calling and General Well-Being

Beyond work-related outcomes, another area of research on calling has investigated the role calling may play in an individual's overall well-being. One criterion variable that has received a large amount of study is life meaning. Steger et al. (2010) measured calling and life meaning in highly religious and less religious undergraduate students. These researchers found that calling significantly and positively predicted greater life meaning. Furthermore, life meaning significantly mediated the link between calling and psychological adjustment, suggesting that life meaning is an essential component of calling. Other studies have found similar moderate positive correlations between presence of calling and life meaning (Duffy & Sedlacek, 2010; Duffy, Allan, & Bott, 2012; Duffy, Manuel, Borges, & Bott, 2011). In addition to life meaning, early research on calling found that those who approached their work as a calling reported higher levels of life satisfaction relative to those who approached their work with a job or career orientation (Davidson & Caddell, 1994; Wrzesniewski et al., 1997; Peterson et al., 2009). More recent measures of calling (e.g., the BCS and CVQ) have also been used to investigate the link between calling and life satisfaction, finding weak to moderate correlations between these two constructs in undergraduate (Duffy & Sedlacek, 2010; Steger et al., 2010; Duffy, Allan et al., 2012) and medical student populations (Duffy, Manuel et al., 2011).

Recent research also has attempted to understand possible mediators between calling and life satisfaction. Several effects have been shown. Steger et al. (2010) found religiousness to significantly mediate this relationship for religious students. They also found life meaning to

mediate the relationship between calling and life satisfaction for both highly religious and less religious students. Later research by Duffy, Bott et al. (2012) found that life meaning and academic satisfaction fully mediated the relationship between calling and life satisfaction. Other research has found career goal self-efficacy (Allan & Duffy, 2014) as well as self-congruence (i.e., whether or not one perceives harmony between his or her ideals and actual self) and engagement orientation (i.e., whether or not one acts in ways that are in line with one's strengths and aptitudes; Hagmaier & Abele, 2015) to partially mediate the association between calling and life satisfaction. More recent research has found that increased motivation to pursue one's calling demonstrated direct effects on living a calling and life meaning and indirect effects on life satisfaction (Duffy, England, Douglass, Autin, & Allan, 2017). While several constructs have been found to at least partially mediate or moderate the relationship between calling and life satisfaction, future research is still needed in this area.

Sources of Calling

If calling is a construct that is associated with positive outcomes such as job satisfaction and life satisfaction (among many others), it is important to understand where these callings come from: that is, the perceived source of these callings. Qualitative studies in this area have allowed participants to respond in an open-ended manner to the question of the source of their callings. Qualitative responses from undergraduate students (Hunter et al., 2010) and working adults (Bunderson & Thompson, 2009; Duffy, Foley et al., 2012; Hernandez, Foley, & Beitin, 2011) have yielded a variety of sources of calling such as a Higher Power, family, friends, personal interests, values, and a sense of destiny, among others. In their review of the calling literature, Duffy and Dik (2013) summarize these sources of calling as fitting into three

categories: external, internal, or some combination of both. While these categories are imperfect (Dik & Duffy, 2012), they capture the vast range of responses of participants.

While it is generally understood that individuals may experience different sources of calling, less is understood about the extent to which the particular source of one's calling affects one's lived experience. Duffy and Dik's (2013) review of calling research illuminated the need to further understand what participants define as the source of their calling. The review also called for research examining whether or not the source of one's calling is a necessary part of the construct: Does calling function differently depending on its perceived source? Duffy, Allan, Bott, and Dik (2014) followed up on this question by examining whether or not the source of one's calling related to living a calling and job and life satisfaction. The researchers examined three sources of calling for their study: external summons, destiny, and perfect fit. Their analyses revealed that, when given only these three options, 55% of participants identified their source of calling as a perfect fit, 23% an external summons, and 22% a sense of destiny. Furthermore, the researchers found that levels of living a calling and job and life satisfaction did not differ based on the source of one's calling. Finally, the researchers also examined whether or not source of calling moderated the relationship between living a calling and job and life satisfaction. In general (and consistent with previous research), living a calling was positively correlated with life satisfaction and job satisfaction. Most importantly, the source of one's calling did not moderate the relationship between living a calling and job satisfaction. However, the source of calling did moderate the relationship between living a calling and life satisfaction. This effect was such that, for those with destiny beliefs, the slope was steeper and the relationship between living a calling and life satisfaction was stronger. That is, when living a calling was low, those with destiny beliefs experienced significantly less life satisfaction relative

to those who identified a perfect fit or external summons as a source of their calling. However, it is also worth noting that participants who endorsed high levels of living a calling experienced very similar levels of life satisfaction, regardless of the source of that calling.

The research by Duffy et al. (2014) helps explain that the source of calling may matter very little (if at all) when examining links between living a calling and life and job satisfaction. However, further study is needed to corroborate these findings. Moreover, this study used unique source groups (external summons, destiny, and perfect fit) that have not been used together elsewhere in calling literature. It is possible that applying the three source categories (external, internal, or both) proposed by Duffy and Dik (2013) may yield different results when using similar investigative methods.

Prevalence of Calling

Another area of study in calling research concerns the overall prevalence of these constructs. Previously mentioned research by Wrzesniewski et al. (1997) used three work orientation categories (i.e., job, career, and calling) and found that approximately one third of the participants endorsed having a calling. Later research by Duffy, Dik, and Steger (2011) found that approximately one half of adults surveyed at a university said that they had a calling to a particular kind of work. Additionally, two thirds of a sample of college students said that the concept of calling was relevant to their career (Hunter et al., 2010). The prevalence of calling has also been tested using the Brief Calling Scale (BCS; Dik et al., 2012). In a survey of 5,523 undergraduate students, Duffy and Sedlacek (2010) found that, when asked if they have a calling to a particular kind of work, 30% of respondents stated that this was mostly true of them while 14% felt it was totally true of them. Similarly, in a survey of 671 working adults, 28% said the

statement was mostly true of them while 15% said it was totally true of them (Duffy, Allan et al. 2013). This supports the notion that calling is a relevant construct for a large number of people.

Calling has been found to be similarly prevalent in a large number of studies, but a shortcoming of this research is that a high percentage of these studies have been regionally isolated. Duffy and Dik (2013) noted that most research on calling had been conducted using North American individuals who are predominantly White. A vast majority of these participants have been either undergraduate college students or working adults. There have been a number of recent exceptions to this pattern, however. For example, Torrey and Duffy (2012) studied calling in employed and unemployed adults using participants from several regions throughout the United States. Additionally, other research in the United States has studied the prevalence of calling across racial groups, finding that calling does not significantly differ across these groups (Duffy & Autin, 2013; Duffy & Sedlacek, 2010). Outside of the United States, calling has been studied in countries such as Australia (Praskova, Creed & Hood, 2014), Canada (Domene, 2012), China (Zhang, Dik, Wei & Zhang, 2015; Zhang, Hirschi, Hermann, Wei & Zhang, 2016), Germany (e.g., Hagmaier & Abele, 2012; Hirschi, 2011, 2012; Hirschi & Hermann, 2012, 2013), India (Douglass, Duffy & Autin, 2016), New Zealand (Lips-Wiersma & Wright, 2012), Romania (Dumulescu et al., 2015), South Africa (van Zyl et al., 2010), South Korea (Shin, Steger, & Lee, 2013), and Zambia (Rothmann & Hamukang'andu, 2013), though these studies also were regionally isolated. Peterson et al. (2009) found that calling was a relevant construct for participants ranging across more than 70 countries who participated in an online survey. Despite gains in these areas, Duffy and Dik (2013) discussed the need for research in larger and more diverse samples to answer definitively if calling is a relevant construct for many different people and to identify demographic differences in prevalence, if any.

Current Study

Though research on calling has grown considerably in the past decade, many questions remain unanswered. Two predominant sets of questions concern the impact of the particular source of calling that one perceives, and also the construct's overall prevalence in the broader population. What do people largely identify as the source of their calling? What role, if any, does the source of one's calling play in the relationship between living a calling and job satisfaction and well-being correlates? On a more basic level, how prevalent is calling in the United States? Does the extent to which people view their work as a calling differ across key demographic variables (e.g., sex, race and ethnicity, religious affiliation, political affiliation, and employment status)?

The present study aimed to answer these questions using data from the Portraits of American Life Study (PALS). The PALS project is a panel study of religion in the United States with a special focus on capturing racial and ethnic diversity. While calling variables were included as measures in the study, the survey also captured views on spirituality and religion, health, and social relationships, among other variables. Part One of this study uses the PALS data to examine the prevalence of calling in the United States. These data are nationally representative and provide the most definitive picture to date of the overall prevalence of calling in the country. These data also show how calling is distributed across different social demographics. Part Two of this study examines the role of sources of calling in living a calling and job satisfaction. Also, research on meaning and purpose in life consistently show intercorrelations between life satisfaction (to which calling has been extensively linked), purpose, hope for the future, and lower levels of depressive symptoms (e.g., Feldman & Snyder, 2005; Heisel & Flett, 2004; Park, Park, & Peterson, 2010; Kleftaras & Psarra, 2012;

Chamberlain & Zika, 1988). Based on these findings, Part Two of this study also uses the PALS data to investigate the role of sources of calling in moderating relationships between living a calling and these aspects of general well-being, namely purpose, hope for the future, and depressive symptoms.

This two-part study provides an opportunity to test several hypotheses. The first set of research questions and hypotheses concern the prevalence of calling in the United States. The research questions and hypotheses for the prevalence of calling are as follows:

1. How prevalent is calling in the United States (across all demographics)? While a formal hypothesis was not included for this question, it was expected that slightly under half of participants would endorse that it is “mostly true” or “totally true” that “I have a calling to a particular kind of work.” This estimate was based on the findings from Duffy and Sedlacek’s (2010) survey of 5000 university students in which 30% reported that this statement was mostly true of them and 14% felt it was totally true of them. A study on working adults by Duffy, Allan et al. (2013) also found that 28% of participants said this same statement was mostly true of them and 15% thought it was totally true of them.
2. Does the extent to which people view their work as a calling differ across age, gender, race and ethnicity, income, employment status, political affiliation, religious tradition, and importance of spirituality?

Hypothesis 1: It is hypothesized that presence of calling and search for calling do not significantly differ across various age groups. This hypothesis is based on findings by Duffy and Allan (2013) in which these researchers found no relationship between perceiving a calling and age.

Hypothesis 2: It is hypothesized that men and women do not significantly differ in levels of presence of and search for calling. This lack of difference between genders was found in the work by Duffy and Sedlacek (2010).

Hypothesis 3: It is hypothesized that presence of and search for calling do not meaningfully differ across racial groups. This hypothesis is based on the finding from Duffy and Sedlacek (2010) in which African-Americans were found to have significantly higher rates of presence of calling, but the authors referenced the small effect size of this finding, cautioning against drawing conclusions about meaningful differences between racial groups.

Hypothesis 4: It is hypothesized that rates of presence of and search for calling do not significantly differ across income levels. This hypothesis is based on the findings by Duffy and Autin (2013) and Duffy, Allan et al. (2013). In these studies it was found that those with higher incomes and higher educational attainment were more likely to be living a calling, but no more likely to be perceiving a calling than those with lower incomes and lower educational attainment.

Hypothesis 5: It is hypothesized that those who reported being employed full-time and part-time would have higher rates of presence of calling than those with other employment statuses (e.g., student and unemployed). This hypothesis is based on the fact that the survey examined calling as it relates to the work role.

Hypothesis 6: It is also hypothesized that rates of presence of and search for calling are significantly greater for those that reported that they belong to a particular religious tradition (regardless of religion) than those that do not. This

hypothesis is based on the term's religious roots and that a widely used definition of calling includes the idea of a "transcendent summons" (Dik & Duffy, 2009).

Hypothesis 7: It is hypothesized that those who report a higher importance of spirituality in their lives have higher rates of presence of and search for calling than those who report that spirituality is relatively unimportant to them. This hypothesis is based on studies that have found significant positive relationships between spirituality and a sense of calling within specific professions such as counseling (Hall, Burkholder, & Sterner, 2014) and social work (Hirsbrunner, Loeffler, & Rompf, 2012).

The second set of hypotheses concerns the role of sources of calling. Duffy et al. (2014) called for future research to search for additional sources of calling (beyond external summons, destiny, and perfect fit) and that sources of calling should be studied in broader and more representative populations. This study followed this directive by studying source of calling in a nationally representative sample and by using internal, external, or both as source categories. Though the categories used by Duffy et al. were different than the categories that were used in the present study, this previous research informed current research questions and hypotheses. The research questions and hypotheses concerning source of calling are as follows:

1. What do people largely identify as the source of their calling (internal, external, or both)?

Hypothesis 8: It is hypothesized that the number of individuals who identify the source of their calling as both internal and external is significantly greater than the number of those that identify the source of their calling as either internal or external. This hypothesis is based on the finding from Duffy et al. (2014) that perfect fit was the most commonly endorsed source group. It is argued that

perfect fit may resemble the “both” group in this study. These two groups may have overlap in that they may both be seen as a source in which external forces and internal drives contribute to one’s sense of calling.

2. What role, if any, does the source of calling play in the relationship between living a calling and job satisfaction?

Hypothesis 9: Similar to the findings of Duffy et al. (2014), it is hypothesized that source of calling does not moderate the relationship between living a calling and job satisfaction.

3. What role, if any, does the source of calling play in the relationship between living a calling and well-being correlates (purpose, hope for the future, and depressive symptoms)?

Hypothesis 10: It is hypothesized that source of calling moderates the relationships between living a calling and well-being correlates (purpose, hope for the future, and depressive symptoms), such that the relationship between calling and well-being outcomes is stronger for those with an internal source of calling. More specifically, when these individuals score lower on living a calling, it is hypothesized that they experience significantly lower well-being than those in the other two source categories. However, when these individuals endorse high levels of a calling, it is expected that their well-being is not significantly higher than those in the other two source groups. This hypothesis mirrors the finding by Duffy et al. (2014) concerning those who identified their calling as being a matter of destiny. The present hypothesis comes from the hypothesis that those identifying an internal source of calling are more likely to link more of their

identity to their calling. So, when one is not living his or her calling, she or he is likely less satisfied with life than others.

CHAPTER II

Method

Participants and Sampling Procedure

This study used archived data that was collected in Wave 2 of the Portraits of American Life Study (PALS), a panel study of religious life in the United States. The study used probability sampling techniques to represent the adult population of the United States and made significant efforts to capture ethnic and racial diversity. The study was conducted in two waves: one in 2006 and another in 2012 where respondents were re-interviewed (along with new participants). This study only used data collected in 2012. A four stage sampling method was used to achieve a probability sample that also included racially diverse oversamples. This design was created and carried out by RTI International, which is the second largest independent nonprofit research organization in the United States. RTI states that the data obtained for the PALS are meant to reflect the civilian, non-institutionalized household population of the continental United States who were 18 years old or older at the time of the first data collection and who speak English or Spanish. This sampling frame was created from the use of residential mailing lists. However, to capture a greater degree of the population, a frame-linking procedure (described below) was also used to include households not on these residential mailing lists. RTI estimates that this sampling procedure accounted for over 98% of the occupied housing units in the United States.

The four stage sampling method was carried out to ensure that the participants in the study were reflective of the broader population of the continental United States. The sampling method was guided by an attempt to gather a geographically representative sample of the broader

population. The first stage of this method used census data to create Primary Sampling Units (PSUs) that were defined as three-digit zip code tabulation areas. A total of 60 of these primary sampling units were randomly selected and these areas were geographically spread, adequately capturing minority populations. The second stage of this method involved the selection of two five-digit zip code areas from each PSU. Again, zip code areas were retained that had higher numbers of minority households relative to similar size zip code areas. The third stage of the sampling procedure involved selecting 100 addresses from each selected zip code. While this technique resulted in a sampling frame based on residential mailing lists, a half-open interval (HOI) frame-linking procedure (i.e., combining the existing sampling frame of residential mailing list with a sampling frame of houses not included on the mailing lists) was also used to identify homes that were not on the residential mailing lists. This process was achieved by creating digital maps of a sub-sample of selected addresses. These maps were analyzed for housing units that were not on the residential mailing list. Field interviewers confirmed the existence of these housing units and these units were added to the pre-existing sampling frame to expand coverage (McMichael, Ridenhour, Mitchell, Fahrney, & Stephenson, 2008). Some households were found to be ineligible for the study due to not having an occupant, a lack of English or Spanish speakers, or due to physical or mental incompetence. Finally, the fourth stage of the sampling procedure involved random selection of an occupant in each home to complete the survey. This four stage sampling procedure was guided by geographic boundaries and an oversampling of minority population areas to gather a sample that was nationally representative.

The sampling procedures mentioned above resulted in a nationally-representative dataset. In all, Wave 1 of the PALS (conducted in 2006) collected results from 2,610 respondents. In

2012, Wave 2 of the PALS re-interviewed over 1,300 of these participants as well as about 100 new participants who were living in the household of the original 2006 respondents and were 14-18 years old in 2006. This resulted in a final sample size of 1,419 participants for Wave 2 of the study.

Interview Procedure

While this study used data from Wave 2 of the PALS, it is important to gain a brief understanding of the interview procedures used in Wave 1 of the study. This is because a vast majority of participants that were in Wave 2 of the PALS were also in Wave 1 and many of the procedures used in Wave 1 were replicated for Wave 2. For Wave 1 of the PALS, respondents were interviewed in their own home. Interviewers visited the sample households and completed a screening (using paper and pencil) to ensure that respondents spoke English or Spanish and were otherwise competent and fit to respond. Respondents were then given a questionnaire that lasted about 80 minutes using a laptop computer. Participants were given \$50 to complete the interview. Because some of the questionnaire covered sensitive topics such as relationships, deviance, and attitudes toward race and ethnicity, morals, and religious beliefs, respondents were also given a device to complete an audio computer-assisted self-interview for these questions. This portion of the interview consisted of about 70 questions. During this portion of the interview participants completed the survey independent of the interviewer, listening to prerecorded questions on the device.

In 2012, roughly half of the respondents from Wave 1, along with about 100 new respondents, completed surveys online, by telephone, and in person. Some participants were randomly assigned the telephone interviews so that the researchers could assess the potential impact of mode of interview on participant responses. The response frequencies for each mode

of interview were as follows: 80% occurred online, 13% were completed by telephone, and 7% of respondents were interviewed in person. The researchers found that mode of interview had very little impact on responses. Respondents for Wave 2 of the study were compensated \$50 for online surveys, \$30 for phone surveys, and \$50 for in person surveys.

Measures

All participants in Wave 2 of the PALS were administered a survey-driven interview protocol covering question topics ranging from demographic identifiers, attitudes toward work, religious and spiritual beliefs, and physical and mental health, among others. As part of this survey, a set of items were administered to assess variables related to participants' sense of calling and other attitudes related to their work and well-being. In regard to the items measuring calling, participants were offered the following definition of calling: "Broadly speaking, a 'calling' refers to a person's belief that she or he is called upon – by the needs of society, a person's own inner potential, God, et cetera – to do a particular kind of work." For individuals who endorsed full-time or part-time employment, they were told to think about calling as it applied toward their "career as a whole." For those who identified themselves as a student, homemaker, unemployed, or "Other," they were given the following prompt: "Respond with your career as a whole in mind. For example, if you are currently working part time in a job that you don't consider part of your career, or if you are unemployed or a full-time student, focus on your career as a whole and not your present situation." For those who indicated that they were retired, they were told to think about calling as it applied to the work they were doing in retirement, whether paid or unpaid.

Search for and Presence of Calling

Search for calling and presence of calling were measured using the Brief Calling Scale (BCS; Dik et al., 2012). The BCS is a 4-item scale that gives the statements “I have a calling to a particular kind of work,” “I have a good understanding of my calling as it applies to my career,” “I am trying to figure out my calling in my career,” and “I am searching for my calling as it applies to my career.” Five response options were possible for items on the BCS: not true, mildly true, moderately true, mostly true, or totally true. Dik et al. (2012) report that scores on the two items measuring presence of calling correlate $r = .81$ with each other while scores on the two items measuring search for calling correlate $r = .75$. Scores on the BCS were also found to correlate in hypothesized directions with sense of calling, career decidedness, self-clarity, career decision self-efficacy, meaning in life, intrinsic work motivation, and materialism. Dik et al. also found that scores on the BCS had good evidence of convergent and discriminant validity when assessed using a multitrait, multimethod analysis incorporating both self- and informant-report ratings.

Living a Calling

Living a calling was measured by recording participants’ response to the statement, “I am living out my calling in my job right now.” Five response options were possible for this item: not true, mildly true, moderately true, mostly true, or totally true. This item was taken from the six-item Living a Calling Scale (LCS; Duffy, Allan et al., 2012). Though this study used one item from the LCS, it is worth noting that the items on the LCS have been found to be highly intercorrelated ($\alpha = .85$).

Job Satisfaction

Job satisfaction was measured by asking the question, “In general, how satisfied or dissatisfied are you with your job?” Five response options were possible for this item: very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied, or very dissatisfied. In their meta-analysis, Wanous, Reichers, and Hudy (1997) found a corrected mean correlation between single-item and multiple-item job satisfaction measures to be $r = .67$. They also found that the minimum estimated test-retest reliability for single-item measures to be about .70. These findings suggest that single-item job satisfaction measures are acceptable for use in research.

Purpose in Life

Purpose in life was measured by responding to the statement, “I believe there is some real purpose for my life.” Five response options were possible for this item: strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree.

Hope for the Future

Positive outlook for the future was measured by responding to the statement, “I feel good about my future.” Five response options were possible for this item: strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree.

Depressive Symptoms

Finally, depressive symptoms were measured by asking the question, “In the past 6 years, have you ever had two weeks or longer when nearly every day you felt sad, empty, or depressed for most of the day?” Two response options were possible for this item: yes or no. In a study of outpatient psychiatric patients, single-item measures of depression were reliable and valid in distinguishing between depressed and non-depressed patients (Zimmerman et al., 2006).

Furthermore, this study found single-item measures of various psychosocial variables were acceptable for use.

Source of Calling

The source of an individual participant's calling was measured by asking the question, "What is the source of your calling?" The participants were given three response options: internal, external, or both. To help participants understand the distinction between these source groups, examples were provided. For external source of calling, the examples provided were "called by God, destiny, needs in my community, a family legacy, etc." For internal source of calling, examples provided were "my own abilities, passions, values, etc."

Age

Each participant's age was measured by asking the question, "What is your age?" Participants provided numeric responses indicating their age.

Gender

Participant gender was measured by asking the question, "What is your gender?" Participants were given two response options: female or male.

Race

Each participant's race was measured by asking the question, "What is your race?" Eight response items were possible for this item: white/Caucasian/Anglo-American, Black/African-American, Hispanic/Latino, Asian/Asian-American, Pacific Islander, Native American, Mixed Race, or Other.

Income

Participants' household income was measured by asking the question, "In 2010, what was your household income?" Participants indicated which bracket their income was in: Less than

\$20,000, between \$20,000 and \$40,000, between \$40,000 and \$100,000, and greater than \$100,000.

Employment Status

Each participant's employment status was measured by asking the question, "What is your employment status?" Each participant provided responses in the following categories: full-time, part-time, retired, homemaker, student, unemployed, and other. If participants provided an affirmative response to the Other category, they were instructed to provide a qualitative response to clarify their employment status.

Political Affiliation

Participant political affiliation was measured by asking the question, "What is your political affiliation?" Four response options were included: Democrat, Republican, Independent, or Something Else.

Religious Tradition

Each participant's religious tradition was gathered by asking the question, "To which religious tradition do you belong?" Response options included Black Protestant, Evangelical Protestant, Mainline Protestant, Catholic, Jewish, Other Faith, Non-affiliated, or Protestant Other. These categories were developed by Steensland et al. (2000). These researchers developed a seven-category approach, arguing that these categories capture historical and sociological differences between religious groups in the United States. Emerson and Essenburg (2013) explain that the PALS added Protestant Other as a category to capture individuals who identified as Protestant, but were unable to classify which category they belonged to.

Importance of God or Spirituality

The importance of God or spirituality was measured by asking the question, “How important is God or spirituality in your life?” Five responses options were included: not at all important, somewhat important, very important, extremely important, or by far the most important.

Data Analysis

Part One of the present study aimed to identify prevalence rates of searching for calling and presence of calling in the sample. To test our hypotheses concerning rates of prevalence in certain populations, frequencies of presence of and search for calling were reported by age, gender, race and ethnicity, income, employment status, political affiliation, religious tradition, and importance of God or spirituality. After frequency data were obtained, chi-square tests of independence were conducted to see if the proportion of individuals reporting presence and search for calling varied by demographic category. Weighted frequencies were used in these analyses in order to take into account the complex sampling design.

Part Two of the present study aimed to identify the extent to which source of calling (external, internal, or both) moderated the relationship between living a calling and job satisfaction and general well-being variables. To examine this, the methodology for testing moderators in counseling psychology research recommended by Frazier, Tix, and Barron (2004) and used by Duffy et al. (2014) was utilized. This method involved dummy coding levels of the moderator in one level of the analysis while imputing the interaction terms between the predictor (living a calling) and the moderator levels (source groups). Multivariate logistic regression analyses revealed whether or not the source of one’s calling moderated the relationships between living a calling and the various outcome variables. Sample stratum and clustering were

accounted for by using the sampling weights provided in the PALS dataset to ensure that the variances were adjusted for the complex survey design and produced correct confidence intervals around the effect estimates.

CHAPTER III

Results

Part One

Preliminary Analyses

Part One of this study sought to understand the prevalence of calling in the United States. Preliminary analyses were included to understand presence of and search for calling. The two items pertaining to presence of calling were found to be correlated, $r(1385) = .79, p < .05$. The two items pertaining to search for calling were found to be correlated as well, $r(1382) = .78, p < .05$. However, when items on the BCS for each construct were summed, presence of and search for did not demonstrate a significant relationship, $r(1388) = .08, p = .08$.

Recoding Variables

Before analyses for Part One of this study were begun, several variables were recoded to aid in the interpretation of results. First, presence and search for calling were recoded. The responses to the first two items of the BCS (i.e., “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”) were summed to obtain a single score measuring presence of calling. The same procedure was used for the items pertaining to search for calling (“I am trying to figure out my calling in my career” and “I am searching for my calling as it applies to my career”). Once presence of calling and search for calling were calculated, each of these variables were made into binary variables. Responses were split into not at all, mildly, or moderately true of me vs. mostly or totally true of me. This dichotomy is similar to the way in which calling has been reported in other prevalence studies (Duffy & Dik, 2013).

In addition to presence and search for calling, other demographic variables were recoded for later analyses. Age was recoded from a continuous variable to a categorical variable with categories of 18-25, 26-40, 41-60, and 61 or older. This allowed for examining whether or not calling differed by age group, similar to the way other categorical variables were studied. Race was also recoded in our analyses. While race originally had eight categories in our analyses, this resulted in several cells being very small, making results unreliable. To address this, Pacific Islander, Native American, Mixed Race, and Other categories were collapsed, as they were smallest, yet did not appear to significantly differ in terms of levels of calling.

Finally, in the PALS interview protocol participants were able to endorse multiple employment status categories (e.g., both in school and engaged in part-time employment). In all, 159 participants provided multiple responses to this question. Since we were interested in potential differences between these groups, those with multiple responses were recoded such that each participant was allotted one response. As we were primarily interested in potential differences between those who were employed and those who were not, conflicts between multiple responses were solved by giving priority to a participant's employment responses. To begin this process, affirmative responses to the "Other" category were dropped in the cases where multiple responses were provided. In the cases in which a participant responded affirmatively only to the "Other" category (91 participants), responses were recoded based on the qualitative response (e.g., those who indicated they were disabled and not employed were recoded as unemployed). For remaining multiple responses, priority was given in the following order: full time, part time, homemaker, student, retired, and unemployed.

Overall Prevalence of Calling

The first part of this study sought to estimate the prevalence of calling in the United States and understand the degree to which prevalence may differ across various demographics. To answer the question regarding the overall prevalence of calling in the United States, weighted percentages and the 95% confidence intervals for each item in the BCS were collected (see Table 1). In this analysis, weighted percentages are reported rather than simple percentages. This allows the sample data to reflect estimates of population characteristics. As can be seen in Table 1, in response to the item, “I have a calling to a particular kind of work,” it is estimated that roughly 21% of those in the United States felt this was “mostly true” of them, while 22% felt this was “totally true” of them.

Calling Across Demographic Categories

To answer the question as to whether or not the prevalence of calling may significantly differ across demographic categories, Rao-Scott chi square analyses were completed for each demographic category to account for the complex survey data. These analyses examined differences in prevalence of calling among all demographic categories for both presence of and search for calling. For each of these outcome variables, calling was reported in a binary fashion (i.e., not at all, mildly, or moderately true of me vs. mostly or totally true of me).

With regard to presence of calling, a number of demographic categories did not significantly differ in the proportion of those who endorsed both presence of calling categories (i.e., not at all, mildly, or moderately true of me vs. mostly or totally true of me). Table 2 depicts weighted percentages for presence of calling across each demographic category. Rao-Scott chi square analyses demonstrated no relationship between gender and presence of calling, $\chi^2(1, N = 1377) = 0.04, p = .84$. Both genders appeared to have similar rates of varying degrees of calling.

Presence of calling also did not significantly differ across racial groups, $\chi^2(4, N = 1377) = 7.82, p = .10$. Across household income groups, there were no significant differences in presence of calling, $\chi^2(3, N = 1179) = 4.39, p = .22$. Similarly, Rao-Scott chi square analyses showed no relationship between political affiliation and presence of calling, $\chi^2(3, N = 1370) = 2.17, p = .54$. Finally, presence of calling did not significantly differ across religious traditions, $\chi^2(7, N = 1377) = 8.11, p = .32$.

However, a number of significant differences in presence of calling among demographic categories were found. A Rao-Scott chi square analysis found that presence of calling did significantly differ across age groups, $\chi^2(3, N = 1377) = 13.63, p < .01$. While chi square analyses do not directly show where specific differences among groups may lie, weighted percentages in Table 2 describing the sample suggest that individuals 61 or older were less likely than other age groups to report increased presence of calling. Also, for those 26-40, the proportion of those endorsing presence of calling as mostly or totally true (52.25%) was higher than those endorsing not at all, mildly, or moderately true (47.75%), a trend not seen any other age group.

Significant differences in presence of calling were also found across employment status categories, $\chi^2(5, N = 1377) = 29.05, p < .001$. Those who indicated they were employed part-time had increased presence of calling compared to other groups. Furthermore, those indicating they were retired and without employment were more likely to endorse lower presence of calling compared to other groups.

In addition to significant differences across age and employment status, presence of calling also significantly differed as a function of the degree to which individuals reported God or spirituality as being important in life, $\chi^2(4, N = 1377) = 38.83, p < .001$. Those who reported

that God or spirituality was “by far the most” important part of their life reported higher rates of feeling it was mostly or totally true that they had a calling (64.21%). Conversely, those who felt God or spirituality was only “somewhat” important to them were less likely than other groups to report that it was mostly or totally true that they had a calling (29.37%).

With regard to search for calling, differences among demographic categories were found to be similar to the pattern of results for presence of calling. Table 3 depicts weighted percentages for search for calling across each demographic category. As was the case with presence of calling, Rao-Scott chi square analyses found no relationship between gender and search for calling, $\chi^2(1, N = 1376) = 0.08, p = .78$. Search for calling also did not significantly differ across racial groups, $\chi^2(4, N = 1376) = 8.53, p = .07$. For household income, there were no significant differences in search for calling, $\chi^2(3, N = 1179) = 7.18, p = .07$. Rao-Scott chi square analyses also found no relationship between political affiliation and search for calling, $\chi^2(3, N = 1369) = 2.91, p = .41$. Democrats, Republicans, Independents, and other political affiliations did not significantly differ in their search for calling. Finally, search for calling did not significantly differ across religious tradition groups, $\chi^2(7, N = 1376) = 4.60, p = .71$.

As was the case for presence of calling, Rao-Scott chi square analyses for search for calling showed significant differences between demographic categories in terms of the proportion of those who endorsed both search for calling categories. One such analysis showed that search for calling did significantly differ across age groups, $\chi^2(3, N = 1376) = 28.33, p < .001$. Weighted percentages in Table 3 show these differences. It seems that for those 26-40, the proportion of those endorsing search for calling as mostly or totally true (33.88%) was higher than other age groups. Furthermore, individuals 61 or older appeared more likely to endorse lower levels of search for calling compared to other age groups.

Rao-Scott chi square analyses also found differences across employment status in the extent to which people endorsed a search for calling, $\chi^2(5, N = 1376) = 20.71, p < .001$. Student (42.83%) and unemployed (37.15%) populations appeared to be more likely than other groups to endorse that it was mostly or totally true that they were searching for a calling. In regards to lower levels of search for calling, individuals reporting being retired (85.97%) or a homemaker (85.00%) had a greater proportion of individuals in this category compared to other groups.

Finally, search for calling also significantly differed across varying degrees of importance of God or spirituality, $\chi^2(4, N = 1376) = 10.31, p < .05$. In general, the proportion of individuals reporting it was mostly or totally true that they were searching for a calling appeared to increase as importance of God or spirituality increased with those reporting God or spirituality as “extremely” important having the highest rate (30.02%).

Part Two

Recoding Variables

Part Two of this study sought to understand the role of source of calling and the extent to which it may affect the lived experience of calling and other related outcomes. Before analyses began, several variables were recoded for the second part of the study. Many of the categorical variables in this part of the study were recoded into binary categories. The primary reason this was done was to aid in interpretation of results. However, in other cases, multivariate logistic regression models were unable to converge due to small cell sizes. Making the categorical variables binary allowed all models to converge. Living a calling responses were split into not at all or mildly true of me vs. moderately, mostly, or totally true of me. Job satisfaction responses were coded into very or somewhat satisfied vs. neither satisfied nor dissatisfied, somewhat dissatisfied, or very dissatisfied. Both purpose in life and hope for the future were recoded into

strongly or somewhat agree vs. neither agree nor disagree, somewhat disagree, or strongly disagree. These dichotomies were chosen based on differences seen in initial logistic models containing these variables.

To incorporate source of calling into analyses for Part Two of the study, the variable was recoded following steps proposed by Frazier, Tix, and Barron (2004). These steps were also completed by Duffy et al. (2014) in their study involving source of calling. External and internal source of calling groups were dummy coded and included in multivariate logistic regression analyses. In logistic regression analyses involving moderation, interactions between living a calling and external source of calling and living a calling and internal source of calling were entered.

In addition to the variables listed above, some demographic variables were recoded for Part Two of the study. Importance of God or spirituality was recoded from a five-category variable to a four-category variable. This was done because “extremely important” and “by far the most important” response categories behaved similarly across analyses and did not change the significance of results when collapsed. Additionally, employment status was recoded for Part Two of the study. Since Duffy et al. (2014) explored the role of source of calling among employed adults, an effort was made to analyze only those who indicated full-time or part-time employment. Unfortunately, removing individuals who did not endorse these categories from the sample resulted in a significantly reduced sample size and many logistic models were unable to converge due to empty or very small cells. For this reason, all participants were included in Part Two of the study, regardless of employment status. Instead, employment status was included as a potential confounder in later analyses. As we were primarily interested in differences between those who reported being employed and those who did not, employment

status was dichotomized (full-time and part-time vs. retired, homemaker, student, and unemployed).

Prevalence of Each Source of Calling

In order to begin understanding the role of source of calling, the prevalence of each source of calling (external, internal, or both external and internal) was examined. Weighted percentages for each source of calling were used to estimate prevalence in the United States. External source of calling was the least represented source category (9.56%), while Internal (43.71%) and Both (46.73%) categories were relatively equally represented. It is important to note that source of calling was not measured for individuals who answered “not true of me” to either of the items on the BCS pertaining to presence of calling. This resulted in 356 participants missing from the analysis (leaving 1029 participants remaining).

Preliminary Analyses

A main goal of this study was to understand whether or not source of calling affected the relationships between living a calling and job satisfaction and well-being correlates (i.e., purpose in life, hope for the future, and depression). Prior to investigating this, preliminary analyses were completed to explore each combination of relationships between outcome variables. Rao-Scott chi square analyses found significant relationships between job satisfaction and hope for the future, $\chi^2(1, N = 900) = 35.70, p < .001$. Individuals with higher levels of hope were more likely to report being very or somewhat satisfied with their job (82.90%) compared to those with lower levels of hope (47.87%). Relationships between job satisfaction and purpose in life ($\chi^2 = 3.02, p = .08$) and job satisfaction and depression ($\chi^2 = 0.78, p = .38$) were non-significant. Among well-being variables, purpose in life was significantly related to hope for the future, $\chi^2(1, N = 1377) = 130.62, p < .001$. Individuals with higher levels of hope were more likely to

strongly or somewhat agree that there is a real purpose for their life (92.47%) compared to individuals with lower levels of hope (57.11%). Purpose in life was not significantly related to depression ($\chi^2 = 1.94, p = .16$). Depression was significantly related to hope, $\chi^2(1, N = 1091) = 19.34, p < .001$. Individuals with lower levels of hope were more likely to report feeling depressed within the past 6 years (44.73%) compared to those with higher levels of hope (20.17%).

After relationships between outcome variables were investigated, Rao-Scott chi square analyses were used to determine whether or not demographic variables from Part One of the study were related to primary variables in Part Two of the study. In regards to living a calling, a significant relationship was found with spirituality ($\chi^2 = 59.85, p < .001$) while other relationships were non-significant. For source of calling, significant relationships were found for age ($\chi^2 = 33.54, p < .001$), gender ($\chi^2 = 12.08, p < .01$), race ($\chi^2 = 45.64, p < .001$), and employment status ($\chi^2 = 17.18, p < .001$). For job satisfaction, significant relationships were found for income ($\chi^2 = 9.33, p < .05$) and employment status ($\chi^2 = 4.48, p < .05$). Purpose in life differed as a function of gender ($\chi^2 = 14.22, p < .001$), race ($\chi^2 = 17.86, p < .01$), spirituality ($\chi^2 = 75.66, p < .001$), and religious tradition ($\chi^2 = 35.96, p < .001$). Income ($\chi^2 = 8.70, p < .05$), spirituality ($\chi^2 = 9.78, p < .05$), and employment status ($\chi^2 = 4.37, p < .05$) were related to hope for the future. Finally, depression was related to age ($\chi^2 = 12.37, p < .01$), political affiliation ($\chi^2 = 9.93, p < .05$), and religious tradition ($\chi^2 = 17.04, p < .05$). For explanatory and outcome variables sharing mutual significant relationships with demographic variables, these demographic variables were retained and explored in future analyses as potential confounders.

Models Predicting Job Satisfaction

Before hypothesized models for job satisfaction were analyzed, primary relationships between living a calling, source of calling, and job satisfaction were investigated with mutual significant demographic covariates being added to these relationships as potential confounders. Logistic regression analyses were used to determine whether or not explanatory variables affected the odds of exposure to either job satisfaction category (i.e., satisfaction vs. neutral or dissatisfied). First, logistic regression analyses suggested that living a calling predicted the degree to which individuals feel satisfied in their job, $\chi^2(1) = 49.43, p < .001$. Higher levels of living a calling predicted higher levels of job satisfaction ($OR = 6.70, p < .001$). An external source of calling was not predictive of job satisfaction, $\chi^2(1) = 0.32, p = .57$; neither was an either internal source, $\chi^2(1) = 0.13, p = .72$.

Though it was not a focus of the study, an effort was made to explore potential relationships between living a calling and source of calling. As source of calling may conceptually precede living a calling, models were investigated with living a calling as the dependent variable and source of calling as a predictor. Logistic regression analyses found that source of calling was related to living a calling, $\chi^2(1) = 13.87, p < .001$, such that an internal source of calling was predictive of lower reports of living a calling compared to other source groups ($OR = 0.48, p < .001$) and external source of calling ($OR = 2.26, p < .01$) was predictive of higher reports. However, when spirituality was added to the model, the odds ratios were no longer significant. Spirituality was highly significant in this model. Compared to those endorsing God or spirituality as “extremely” or “by far the most” important, those responding “not at all” ($OR = 0.18, p < .001$), “somewhat” ($OR = 0.35, p < .001$), and “very” ($OR = 0.50, p <$

.01) important reported lower levels of calling. For this reason, spirituality was retained for all subsequent models involving living a calling and source of calling.

To test the research question regarding the role of source of calling in the relationship between living a calling and job satisfaction, multivariate logistic regression models were assembled in a hierarchical fashion. While all models had the overall ability to significantly predict job satisfaction, odds ratios were examined to determine which models were the best fit. The decision of whether or not to retain a significant variable in the model was made by observing whether or not odds ratios changed by 10%, a convention used by Zhang and Kai (1998). If the addition of a variable in a new model did not change the original odds ratio for living a calling by at least 10%, the previous model was retained. Furthermore, model fit was assessed by examining the Akaike Information Criterion (AIC) as well as the Log Likelihood Ratio test. Table 5 depicts the odds ratios and their significance levels in each multivariate model predicting job satisfaction. As was previously stated, living a calling was predictive of job satisfaction such that higher levels of living a calling predicted higher levels of job satisfaction. Next, external and internal source of calling were added to the model. While the overall model was significant, $\chi^2(3) = 15.14, p < .001$, the odds ratios for internal and external (see Table 5) showed a lack of main effect for source of calling. In the next step of analysis, interactions between source of calling and living a calling were added. The overall model was significant, $\chi^2(5) = 9.15, p < .001$, with an interaction being found between living a calling and external source of calling ($OR = 0.15, p < .05$). Finally, spirituality was added to the overall model. While the overall model was significant, $\chi^2(8) = 6.54, p < .001$, spirituality did not significantly add to the model. For this reason, the model including living a calling, source of

calling, and the interaction between these two variables was found to be the best model in predicting job satisfaction (see Figure 1).

To further understand the interaction between living a calling and an external source of calling, separate logistic regression analyses were run for each source group (external, internal, and both). Analyses showed that, for those citing an internal source of calling, higher rates of living a calling significantly predicted higher rates of job satisfaction ($OR = 8.50, p < .001$). The same pattern was found for those citing both internal and external as a source of calling ($OR = 7.72, p < .05$). However, for those citing an external source, living a calling was not predictive of job satisfaction ($OR = 1.14, p = .88$). In other words, for those with an external source of calling, individuals were no more likely to be satisfied or dissatisfied with their job based on their sense of the degree to which they were living their calling. Figures 3 and 4 demonstrate this interaction in comparing the external and internal source group dummy coded variables.

Models Predicting Purpose in Life

As with models pertaining to job satisfaction, primary relationships between living a calling, source of calling, and purpose in life were investigated. Analyses were used to determine whether or not explanatory variables and their covariates were predictive of purpose in life (i.e., agreement vs. neutral or disagreement). Living a calling was found to predict purpose in life, $\chi^2(1) = 20.31, p < .001$. Higher levels of living a calling predicted higher levels of purpose in life ($OR = 3.36, p < .001$). When spirituality was added to this model, the model improved, $\chi^2(4) = 17.98, p < .001$. Source of calling was also significantly related to purpose in life, $\chi^2(3) = 12.08, p < .001$ with an internal source of calling being related to lower levels of purpose in life ($OR = 0.29, p < .01$) and an external source being related to higher levels of purpose in life ($OR = 4.05, p < .05$). However, when spirituality was added to the model, the

odds ratios were no longer significant. Compared to those endorsing God or spirituality as “extremely” or “by far the most” important, those responding “not at all ($OR = 0.02, p < .001$),” “somewhat ($OR = 0.06, p < .001$),” and “very ($OR = 0.16, p < .01$)” important reported lower levels of purpose in life. Gender, race, and religious tradition were each added to the model, but relationships were found to be non-significant. As spirituality was significant in relationships among living a calling, source of calling, and purpose in life, the variable was retained in subsequent models.

To test the research question regarding the role of source of calling in the relationship between living a calling and purpose in life, multivariate logistic regression models were assembled in a hierarchical fashion. Table 6 depicts the odds ratios and their significance levels in each multivariate model predicting purpose in life. As was previously stated, living a calling was predictive of purpose in life such that higher levels of living a calling predicted higher levels of purpose in life. Next, external and internal source of calling were added to the model. Internal source of calling significantly added to the model, $\chi^2(3) = 9.32, p < .001$, with an internal source of calling being predictive of lower rates of purpose in life compared to other source groups. In the next step of analysis, interactions between source of calling and living a calling were added. These interactions were not significant in adding to the model and only internal source of calling remained significant in predicting purpose in life (see Table 6). Finally, spirituality was added to the overall model. The overall model with spirituality was significant, $\chi^2(8) = 8.21, p < .001$. Spirituality accounted for all of the significant effects in the model, with higher levels of importance of God or spirituality being associated with higher levels of purpose in life (see Figure 2).

Models Predicting Hope for the Future

Next, relationships between living a calling, source of calling, and hope for the future (agreement vs. neutral or disagreement) were explored, with covariates being added to the models. Logistic regression analyses found that living a calling was predictive of hope for the future, $\chi^2(1) = 32.88, p < .001$. Higher rates of living a calling were predictive of being more likely to report higher rates of hope for the future ($OR = 3.29, p < .001$). Spirituality was added to the model, but not retained, as it did not significantly add to the model. Source of calling was predictive of hope for the future, $\chi^2(2) = 3.45, p < .05$, with an internal source of calling being predictive of lower rates of hope for the future ($OR = 0.57, p < .05$) compared to other groups. External source of calling was not significantly different than other groups. When spirituality was added to this model, neither of the odds ratios for internal nor external source remained significant. Compared to those endorsing God or spirituality as “extremely” or “by far the most” important, those responding “not at all” ($OR = 0.32, p < .05$) and “somewhat” ($OR = 0.40, p < .05$) important reported lower levels of hope for the future. Next, employment status was added to the model. While the odds ratio for employment status was significant, the changes in odds ratios for source of calling were less than 10%, so employment status was not retained in subsequent models. Spirituality was retained in subsequent models, however.

Next, multivariate logistic regression models were assembled to understand what role, if any, source of calling plays in the relationship between living a calling and hope for the future. Table 7 depicts the odds ratios and their significance levels in each multivariate model predicting hope for the future. As was previously stated, living a calling was predictive of hope for the future such that higher levels of living a calling predicted higher levels of hope for the future. Next, external and internal source of calling were added to the model. However, neither source

of calling was retained as they did not significantly add to the model. In the next step of analysis, interactions between source of calling and living a calling were added. These interactions were not significant in adding to the model, though living a calling became non-significant as a predictor when these were added to the model (see Table 7). Finally, spirituality was added to the overall model. The overall model with spirituality was significant, $\chi^2(8) = 2.51, p < .05$. Compared to those reporting “extremely” or “by far the most important,” only those reporting “somewhat important” had significantly lower levels of hope for the future ($OR = 0.32, p < .05$). While spirituality did add to the model, the addition appeared to be minimal. It may be arguable that living a calling on its own was the best model in predicting hope for the future.

Models Predicting Depression

Finally, relationships between living a calling, source of calling, and depression were investigated. Logistic regression analyses were used to determine whether or not explanatory variables were predictive of depression (i.e., yes vs. no). No relationship was found between living a calling and depression, $\chi^2(1) = 0.53, p = .46$. Furthermore, depression was not related to source of calling, $\chi^2(2) = 5.10, p = .08$. Because depression was not related to either explanatory variable, depression was not included in subsequent analyses. Therefore, source of calling did not moderate a relationship between living a calling and depression.

CHAPTER IV

Discussion

Part One of this study sought to estimate the prevalence of calling in the United States. In general, this study found that calling appears to be a prevalent concept for adults throughout the United States. Our analyses showed that roughly 21% of adults in the United States felt that it was “mostly true” that they had a calling to some kind of work, while 22% felt this was “totally true” of them.

Beyond broad rates of prevalence, Part One of this study also sought to understand whether or not calling differed across various demographic categories. We hypothesized that calling would not differ by gender, race, income, and political affiliation. These hypotheses were supported by the data. We also hypothesized that calling would differ based on whether or not a person was affiliated with any religion. This hypothesis was not supported by the data.

Our results did show significant differences across some demographic categories, however. Both presence of and search for calling significantly differed across age groups, which failed to support our hypothesis. Rates of presence of and search for calling generally appeared lower for those 61 or older. For those 26-40, the proportion of those endorsing presence of calling and search for calling as mostly or totally true was higher than other age groups. Calling was also found to differ by employment status. We hypothesized that those endorsing full time or part time employment would have increased calling compared to other groups. We found partial support for this hypothesis. Those who indicated they were employed part time had increased presence of calling compared to other groups. However, substantial differences were not observed for full time employment. Finally, we hypothesized that those endorsing greater

importance of God or spirituality would endorse higher levels of calling compared to those finding God or spirituality to be less important. This hypothesis was supported in the data.

The second set of research questions pertained to the role of source of calling. First, the study sought to find what people identify as the source of their calling. Results showed that external source of calling was the least represented source category, while internal and both categories were relatively equally represented. This conflicted somewhat with the hypothesis that the “both” category would be the most frequently endorsed.

The primary purpose of Part Two of this study was to investigate whether or not source of calling moderated the relationships between living a calling and job satisfaction and well-being correlates. We hypothesized that source of calling would not moderate the relationship between living a calling and job satisfaction. A main effect for living a calling in predicting job satisfaction was found such that higher levels of living a calling were predictive of greater job satisfaction. Main effects were not observed for source of calling. An interaction between living a calling and external source of calling was found. For those citing an internal source of calling and for those citing both internal and external as a source of calling, higher rates of living a calling significantly predicted higher rates of job satisfaction. However, for those with an external source of calling, individuals were no more likely to be satisfied or dissatisfied with their job based on their sense of the degree to which they were living their calling. Our hypothesis was not supported.

Next, we hypothesized that source of calling would moderate the relationship between living a calling and well-being correlates. Living a calling was found to predict purpose in life such that higher levels of living a calling were associated with higher levels of purpose in life. Also, internal source of calling predicted lower levels of purpose in life compared to other source

groups. No interaction between living a calling and source of calling was observed.

Interestingly, spirituality accounted for all of the significant effects in the model, with higher levels of importance of God or spirituality being associated with higher levels of purpose in life. With regard to hope for the future, living a calling was predictive of hope for the future such that higher levels of living a calling predicted higher levels of hope for the future. Source of calling was not predictive of hope for the future, nor were interactions between living a calling and source of calling. Spirituality did add to the model, though only minimally. Living a calling did not predict a depressive episode within the past 6 years; nor did source of calling. Overall, the hypothesis regarding living a calling and well-being correlates was not supported.

Finally, results showed the importance of God or spirituality as being a significant predictor in many calling and well-being relationships. The importance of God or spirituality accounted for relationships between source of calling and living a calling, source of calling and purpose in life, and source of calling and hope for the future. Greater importance of God or spirituality was predictive of greater levels of each of these outcomes.

Implications

This study adds to the existing knowledge base in a number of ways. One of the largest contributions of this study is that it is the only study to date estimating the prevalence of calling in the United States using a stratified national sample. While other large studies have measured the overall prevalence of calling (e.g., Duffy & Sedlacek, 2010; Duffy et al., 2013), the sampling design and data analysis incorporated in this study allow for population estimates. It is important to note that estimates of calling in this study (approximately 43% reporting that it was mostly or totally true that they “have a calling to a particular kind of work”) were similar to reports in

previous studies. Overall, presence of calling appears to be relevant for a majority of individuals in the United States, while fewer individuals report that they are searching for a calling.

This study also adds to the literature on calling by demonstrating the ways in which calling appears to differ across demographic categories. Findings that presence of and search for calling did not differ across gender, race, and income levels is similar to what other studies by Duffy and Sedlacek (2010), Duffy and Autin (2013), and Duffy, Allan et al. (2013) have found. However, the finding that presence of and search for calling differed by age does conflict with Duffy and Allan's (2013) findings, in which they found the opposite to be true. Our study suggested that 26-40 year-olds were more likely than other groups to experience increased levels of both presence and search for calling compared to other groups. This could suggest that calling is particularly relevant for mid-career individuals. On the other hand, individuals 61 or older demonstrated substantially lower reports of presence of and search for calling. This may be due to individuals in this age group being less likely to be engaged in regular work. Evidence from significant observed differences in employment status might support this hypothesis, given that non-employed, retired adults reported lower levels of presence and search for calling compared to other age groups. Recent research by Duffy, Torrey, England, and Tebbe (2017) illuminated several barriers for retired individuals who were not living their calling. Lacking resources to live their calling, age and health issues, and being retired were among these barriers. It may be that disengagement from formal work is a reason for lower levels of calling for these groups. However, conclusions in this area can only be tentative at this time as the present study did not seek to demonstrate direct links between age and employment status in predicting calling. Furthermore, it is unclear whether or not observed age differences may reflect true differences as a result of age or cohort effects.

As presence of and search for calling differed by employment status, several differences among groups were notable. Individuals identifying as unemployed did not appear much different than those that were full-time employed in regards to presence of calling. Unemployed individuals did appear to have higher rates of search for calling, however. These findings may be similar to findings by Duffy, Bott, Allan, and Autin (2015) wherein involuntarily unemployed adults did not differ from employed adults in rates of perceiving a calling. Another interesting finding regarding employment status was the finding that those endorsing part-time employment experienced elevated presence and search for calling compared to other groups. Although findings are not causal, it is interesting to note that part-time employed individuals appeared to experience elevated calling relative to full-time employed individuals. It is unclear what factors may be influencing this difference.

This study also contributes to existing literature by demonstrating relationships between living a calling, job satisfaction, and well-being correlates. Living a calling was predictive of job satisfaction, which is not a new finding in literature on calling (e.g., Duffy, Bott et al., 2012; Duffy et al., 2014). Living a calling was also predictive of purpose in life and hope for the future. These findings are not particularly surprising given the literature linking living a calling to various correlates of well-being such as life meaning (Duffy & Sedlacek, 2010; Duffy, Allan, & Bott, 2012; Duffy, Manuel, Borges, & Bott, 2011) and life satisfaction (Davidson & Caddell, 1994; Wrzesniewski et al., 1997; Steger et al., 2010; Duffy et al., 2014).

More interestingly, this study extends the literature on living a calling, job satisfaction, and well-being correlates by examining whether or not source of calling played a role in these relationships. While Duffy et al. (2014) had investigated this previously, this study used different source groups. Our study conflicted with findings by Duffy et al. in that we found that

source of calling moderated the relationship between living a calling and job satisfaction. More specifically, while internal and both source groups demonstrated increased levels of job satisfaction when they reported higher levels of living a calling, the external source group did not demonstrate a relationship between living a calling and job satisfaction. Furthermore, this study found that source of calling did not moderate the relationship between living a calling and purpose in life and hope for the future. This finding is different than those of Duffy et al., though it does not conflict with their results as Duffy et al. measured life satisfaction rather than well-being correlates.

In examining this study's findings in light of previous research, it appears that source of calling may play a role in the lived experience of calling. However, this role remains unclear. Duffy et al. proposed that a destiny source of calling may cause individuals to feel less in control of their future and experience less life satisfaction when they were not living their calling. In the case of our study, it may be that greater levels of living a calling predict greater job satisfaction when individuals feel their calling has at least some internal component. However, it is possible that those who experience their calling as only external to them will derive a similar amount of satisfaction from their job, regardless of the degree to which they are living that calling. Conversely, having a calling that feels at least somewhat internal may cause one's satisfaction with their job to be more dependent on whether or not they feel they are living their calling. Dik and Shimizu (2018) discussed varying definitions of calling in the literature. They described how some definitions tended toward a neoclassical (i.e., emphasizing a prosocial aspect of calling with an external summons) understanding of calling while others were more fitting of a modern understanding (i.e., more internally driven and emphasizing self-actualization or personal fulfillment). The finding that the relationship between living a calling and job

satisfaction was moderated by source of calling may serve the point that individuals have differing understandings of what calling means and where those callings come from. Those understanding their source of calling as external to them may experience their calling differently than those who feel their calling is more driven by internal aspects of themselves. For example, those with an external source of calling, potentially fitting the description of a neoclassical approach to calling, may have different motives related to their calling compared to those including an internal component. It may be that an external source of calling is perceived by individuals who place less importance on personal satisfaction or pleasure derived from work. For these individuals, living a calling may not predict job satisfaction simply because satisfaction is not a primary desired outcome of one's work. Instead, a greater emphasis may be placed on a "sense of duty" or a prosocial function of that calling. Interestingly, recent research has begun to examine whether or not calling may have a "dark side." Duffy, Douglass, Autin, England, and Dik (2016) explored whether or not calling may predict negative outcomes such as burnout, workaholism, or organization exploitation. While this study did not find living a calling to predict these outcomes, more study is needed to understand whether or not a sense of calling could lead potentially undesirable outcomes.

Another contribution of this study to the existing literature on calling regards the role of spirituality. In Part One of this study, presence and search for calling were found to differ based on varying levels of reported importance of God or spirituality. Generally speaking, individuals with higher importance of spirituality reported higher levels of calling. In Part Two of our study, spirituality was found to be a significant predictor of a variety of outcomes including living a calling, purpose in life, and hope for the future. In fact, spirituality often accounted for relationships between source of calling and these outcomes. While calling as a construct

emerged from religious circles, spirituality as a predictor of calling has received relatively little attention in the calling literature. Neubert and Halbesleben (2015) found that spiritual calling (i.e., an instrument developed by the researchers to measure spiritual aspects of calling) predicted job satisfaction. Furthermore, links between spiritual well-being and sense of calling have been shown (Hall, Burkholder, & Sterner, 2014). While research appears to have addressed constructs similar to spirituality (e.g., meaning in life, hope, and religiosity), less research has examined spirituality directly. The present study demonstrates that feeling that God or spirituality is important in one's life predicts living a calling and well-being correlates. Further study is needed to understand the nature of these relationships.

Applications for Practice

Our study demonstrated, as have many previous studies, that calling is very important in predicting job satisfaction and outcomes related to general well-being. For this reason, career counselors should assess for calling in their clients. Furthermore, our study demonstrated that calling is a prevalent concept across a wide array of population demographics. We found that calling differed significantly by age, employment status, and importance of God or spirituality. While each client should be treated as an individual and counselors should avoid making assumptions, having a general understanding of how calling can differ for these groups may be important. Furthermore, our study demonstrated that importance of spirituality is significant in predicting calling. Knowing this may help career counselors identify clients who may benefit from discussing calling. Clients appearing more spiritually inclined may benefit from being encouraged to explore how their spirituality relates to their sense of their calling.

This study showed that source of calling may affect the degree to which individuals living their calling experience job satisfaction. However, findings remain tentative regarding the

exact nature of source of calling and what it means for the lived experience of calling. Career counselors may want to assess where their client's calling comes from, but should be careful not to draw conclusions about how this may affect the client's ability to feel satisfied in their job and in their life as a whole.

Limitations

While the present study adds to existing literature on calling, the study is not without its limitations. One of the major strengths of this study is the nationally representative nature of the findings. However, the most significant limitation of the present study is the lack of many multi-item, psychometrically sound measures of key constructs. Presence of and search for calling were measured using the BCS, which has been established as a psychometrically sound measure. Aside from these variables, living a calling, source of calling, job satisfaction, purpose in life, hope for the future, depression, and all demographic variables were all gathered via single-item measures. The study represents a broad view of calling across the United States with sacrifice in regards to the depth and nuance of the results.

Another limitation of this study was that a number of variables were collapsed in order to obtain interpretable results. Due to small cell sizes, some demographic categories were collapsed. For example, race was collapsed from an eight-category measure to a five-category measure. While collapsing categories was necessary to increase the size of cells, collapsing four of the racial groups makes that category difficult to interpret. Additionally, calling variables were also collapsed (i.e., not at all, mildly, or moderately true of me vs. mostly or totally true of me). The manner in which these categories were collapsed reflected the way calling has previously been reported, but results are somewhat difficult to interpret as both categories contain individuals who feel they have a calling to some degree.

A final limitation of this study is that, while significant relationships were found among a variety of constructs, these relationships cannot be established as causal in nature as the data in this study were cross-sectional and the design of the study was not experimental. For example, it appears that higher levels of living a calling are associated with greater job satisfaction, purpose in life, and hope for the future. However, one cannot say that living a calling causes an increase in these variables. It may be that feeling satisfied in one's job, having purpose in life, and having hope for the future cause an individual to feel that they are living their calling. Furthermore, while differences were observed in calling across age, employment status, and importance of God or spirituality, one cannot conclude that these categories caused different levels of calling. For example, experiencing a calling could increase the likelihood that one identifies as spiritual or rates God as important, rather than the other way around. Alternatively, a third variable, such as meaning in life, could influence both the degree to which an individual experiences a calling and make it more likely that he or she finds spirituality to be important.

Future Directions

The present study extends the current literature on the prevalence of calling and the role of source. These findings also point toward future areas to explore. This study sought to understand how calling differed across various demographics, not why it differed. For example, this study found lower presence of and search for calling in those 61 or older and retired populations. Therefore, future research should seek to understand what is driving these relationships. Beyond this, differences in age are in need of further research. Further research should seek to clarify whether or not the observed differences in this study reflect cohort differences in presence of and search for calling or if the observed differences represent the

effects of aging on calling. A longitudinal study measuring calling across various time points would help begin to answer this question.

Based on the finding that part-time employed individuals demonstrated greater levels of calling than full-time employed individuals, it may be interesting to investigate whether or not an effect emerges for varying amounts of work. For example, does working fewer hours of work per week have a positive effect on calling? While working long, intense hours at work could predict burnout, it may also be indicative of someone who feels called to their work and experiences a high degree of motivation to remain at work. Some studies have begun to investigate how meaningful work may differ across various types of work (e.g., Lips-Wiersma, Wright, & Dik, 2016), but investigating frequency or amount of work as a predictor of calling would be a new area of study.

While Part Two of this study extended findings by Duffy et al. (2014) by investigating different sources of calling in a nationally representative population, future research may extend the present study by using the same methodology, but with more psychometrically sound measures. Using established measures of living a calling, job satisfaction, and well-being, but with internal, external, or both source groups, may corroborate the findings of this study or yield different results. Furthermore, the present study could be extended by asking individuals to describe how they define calling. These qualitative responses could be examined in light of their reported source group. This would help determine whether or not individuals conceptualize calling differently based on their reported source group. For example, are those who cite an external source of calling less likely to report self-fulfillment and eudemonic well-being as necessary parts of the construct? Beyond researching differing definitions of calling across source groups, exploring differing motivations behind individuals' callings may be important as

well. It is possible that individuals could have different motivations for their callings (e.g., emphasizing personal happiness versus an approach emphasizing prosocial duty) which could lead to very different positive or negative work-related and general well-being outcomes.

Finally, another important area for future research regards the importance of spirituality in understanding calling. While this study found that spirituality predicted living a calling, purpose in life, and hope for the future, further study should seek to understand the nature of these relationships. While greater spirituality may predict increased calling and positive outcomes, the directionality of this relationship is up for debate. For example, living a calling has been shown to facilitate positive outcomes that could correlate with spirituality such as work meaning (Duffy, Bott, et al., 2012) and life satisfaction (Duffy et al., 2014). By extension, it may be reasonable to assume that living a calling could facilitate an increased value of spirituality for an individual. However, longitudinal research by Duffy, Allan, et al. (2014) has found that living a calling may also be modeled as an outcome predicted by positive work outcomes (i.e., career commitment, work meaning, and job satisfaction). Similarly, it may be that greater levels of spirituality in some individuals cause them to begin the process of discerning a calling, with an outcome of living a calling being more likely for these people. While significant positive relationships between spirituality and purpose in life and hope for the future may not be surprising findings, further study should also seek to tease out the directionality of these relationships. Steger (2012) proposed that meaning in life may integrate related constructs such as spirituality, purpose, and well-being, among others. Future research may draw from the literature on meaning in life to understand links between calling, spirituality, purpose, and hope for the future.

TABLES

Table 1

Weighted Percents and the 95% Confidence Intervals for Presence of and Search for Calling Variables

	Not at all True	Mildly True	Moderately True	Mostly True	Totally True
I have a calling to a particular kind of work.	20.78%	16.39%	19.83%	20.86%	22.13%
I have a good understanding of my calling as it applies to my career.	20.20%	16.90%	22.03%	23.06%	17.80%
I am trying to figure out my calling in my career.	38.46%	19.99%	18.08%	14.12%	9.35%
I am searching for my calling as it applies to my career.	42.92%	19.63%	15.92%	13.43%	8.10%

Table 2

Demographic Characteristics of Sample who Endorsed Varying Levels of Presence of Calling

	Not at All, Mildly True, and Moderately True Weighted % (95% CI)	Mostly or Totally True Weighted % (95% CI)	χ^2 (p-value)
Age	-	-	13.63 (< .01)
18-25	51.1 (34.7, 67.5)	48.9 (32.5, 65.4)	-
26-40	47.8 (38.8, 56.7)	52.3 (43.3, 61.2)	-
41-60	54.6 (48.9, 60.3)	45.4 (39.8, 51.1)	-
61+	69.6 (63.5, 75.7)	30.4 (24.3, 36.5)	-
Gender	-	-	0.04 (.84)
Female	54.5 (50.0, 59.0)	45.5 (41.0, 50.0)	-
Male	55.4 (48.7, 62.1)	44.6 (37.9, 51.3)	-
Race and Ethnicity	-	-	7.82 (.10)
White/Caucasian/Anglo	56.8 (51.1, 62.4)	43.2 (37.6, 49.0)	-
Black/African-American	43.5 (34.6, 52.3)	56.5 (47.7, 65.4)	-
Hispanic/Latino	60.7 (49.8, 71.6)	39.3 (28.4, 50.1)	-
Asian/Asian-American	49.5 (34.3, 64.7)	50.5 (35.3, 65.8)	-
Other	44.7 (24.4, 64.9)	55.3 (35.1, 75.6)	-
Household Income	-	-	4.39 (.22)
< \$20,000	52.8 (42.5, 63.0)	47.2 (37.0, 57.5)	-
\$20,000 - 40,000	66.3 (57.1, 75.5)	33.7 (24.5, 42.9)	-
\$40,000 - \$100,000	55.6 (49.3, 61.9)	44.4 (38.1, 50.8)	-
> \$100,000	54.9 (46.9, 63.0)	45.1 (37.0, 53.1)	-
Employment Status	-	-	29.05 (< .001)
Full Time	53.6 (47.7, 59.6)	46.4 (40.5, 52.4)	-
Part Time	39.4 (27.3, 51.5)	60.7 (48.5, 72.8)	-
Retired	75.6 (68.9, 82.2)	24.5 (17.8, 31.1)	-
Homemaker	58.5 (45.1, 72.0)	41.5 (28.0, 54.9)	-
Student	45.0 (16.9, 73.0)	55.0 (27.0, 83.1)	-

Unemployed	56.9 (47.7, 66.1)	43.1 (33.9, 52.3)	-
Political Affiliation	-	-	2.17 (.54)
Democrat	56.9 (50.5, 63.3)	43.1 (36.7, 49.5)	-
Republican	58.4 (50.3, 66.4)	41.6 (33.6, 49.7)	-
Independent	52.7 (44.0, 61.4)	47.3 (38.6, 56.0)	-
Other	45.7 (26.3, 65.0)	54.4 (35.0, 73.7)	-
Religious Tradition	-	-	8.11 (.32)
Black Protestant	46.5 (36.7, 56.2)	53.5 (43.8, 63.3)	-
Evangelical Protestant	56.2 (48.8, 63.6)	43.8 (36.4, 51.2)	-
Mainline Protestant	61.6 (48.9, 74.2)	38.4 (25.8, 51.1)	-
Catholic	59.0 (51.1, 66.9)	41.0 (33.1, 48.9)	-
Jewish	69.2 (44.9, 93.6)	30.8 (6.4, 55.1)	-
Other Faith	47.7 (28.6, 66.9)	52.3 (33.1, 71.4)	-
Non-Affiliated	55.9 (44.4, 67.4)	44.1 (32.6, 55.6)	-
Protestant "Other"	41.9 (25.8, 57.9)	58.2 (42.1, 74.2)	-
Importance of God/Spirituality	-	-	38.83 (< .001)
Not at all	55.3 (42.1, 68.6)	44.7 (31.4, 57.9)	-
Somewhat	70.6 (62.9, 78.4)	29.4 (21.6, 37.1)	-
Very	61.0 (53.0, 69.1)	39.0 (30.9, 47.1)	-
Extremely	49.4 (39.7, 59.1)	50.6 (40.9, 60.3)	-
By Far the Most	35.8 (29.3, 42.3)	64.2 (57.7, 70.7)	-

Table 3

Demographic Characteristics of Sample who Endorsed Varying Levels of Search for Calling

	Not at All, Mildly True, and Moderately True Weighted % (95% CI)	Mostly or Totally True Weighted % (95% CI)	χ^2 (p-value)
Age	-	-	28.33 (< .001)
18-25	72.5 (59.6, 85.4)	27.5 (14.6, 40.4)	-
26-40	66.1 (59.0, 73.3)	33.9 (26.7, 41.0)	-
41-60	83.1 (79.5, 86.7)	17.0 (13.3, 20.6)	-
61+	86.1 (81.3, 91.0)	13.9 (9.0, 18.7)	-
Gender	-	-	0.08 (.78)
Female	77.6 (73.9, 81.3)	22.4 (18.7, 26.1)	-
Male	76.7 (71.8, 81.7)	23.3 (18.3, 28.2)	-
Race and Ethnicity	-	-	8.53 (.07)
White/Caucasian/Anglo	78.2 (73.7, 82.7)	21.8 (17.3, 26.3)	-
Black/African-American	73.1 (67.5, 78.7)	26.9 (21.4, 32.5)	-
Hispanic/Latino	71.2 (63.9, 78.6)	28.8 (21.4, 36.2)	-
Asian/Asian-American	88.6 (81.5, 95.7)	11.4 (4.3, 18.5)	-
Other	75.8 (61.0, 90.6)	24.2 (9.4, 39.0)	-
Household Income	-	-	7.18 (.07)
< \$20,000	69.8 (58.9, 80.7)	30.2 (19.3, 41.1)	-
\$20,000 - 40,000	80.6 (73.6, 87.5)	19.5 (12.5, 26.4)	-
\$40,000 - \$100,000	77.3 (71.9, 82.7)	22.7 (17.3, 28.1)	-
> \$100,000	84.7 (78.6, 90.8)	15.3 (9.2, 21.4)	-
Employment Status	-	-	20.71 (< .001)
Full Time	79.8 (75.6, 84.1)	20.2 (15.9, 24.4)	-
Part Time	68.2 (54.4, 81.9)	31.8 (18.1, 45.6)	-
Retired	86.0 (80.1, 91.8)	14.0 (8.2, 19.9)	-
Homemaker	85.0 (76.3, 93.7)	15.0 (6.3, 23.7)	-
Student	57.2 (28.0, 86.3)	42.8 (13.7, 72.0)	-

Unemployed	62.9 (54.1, 71.6)	37.2 (28.4, 45.9)	-
Political Affiliation	-	-	2.91 (.41)
Democrat	76.7 (71.6, 81.8)	23.3 (18.2, 28.4)	-
Republican	79.0 (73.7, 84.4)	21.0 (15.6, 26.3)	-
Independent	74.3 (66.9, 81.7)	25.7 (18.4, 33.1)	-
Other	85.3 (76.1, 94.4)	14.8 (5.6, 23.9)	-
Religious Tradition	-	-	4.60 (.71)
Black Protestant	73.7 (66.8, 80.5)	26.3 (19.5, 33.2)	-
Evangelical Protestant	76.9 (70.5, 83.3)	23.1 (16.7, 29.5)	-
Mainline Protestant	82.3 (73.5, 91.0)	17.7 (9.0, 26.5)	-
Catholic	80.4 (75.2, 85.7)	19.6 (14.4, 24.8)	-
Jewish	84.5 (69.5, 99.4)	15.6 (0.6, 30.5)	-
Other Faith	78.6 (62.0, 95.3)	21.4 (4.7, 38.0)	-
Non-Affiliated	74.2 (64.8, 83.6)	25.8 (16.4, 35.2)	-
Protestant "Other"	71.1 (58.5, 83.6)	28.9 (16.4, 41.5)	-
Importance of God/Spirituality	-	-	10.31 (< .05)
Not at all	89.1 (83.0, 95.2)	10.9 (4.8, 17.0)	-
Somewhat	79.4 (72.3, 86.4)	20.6 (13.6, 27.7)	-
Very	75.0 (68.4, 81.7)	25.0 (18.3, 31.6)	-
Extremely	70.0 (59.0, 80.9)	30.0 (19.1, 41.0)	-
By Far the Most	75.1 (68.9, 81.2)	24.9 (18.8, 31.1)	-

Table 4

Descriptive Statistics for Main Study Variables

	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Presence of Calling	1393	6.05	2.7	1.00	-	-	-	-	-	-
2. Search for Calling	1390	4.59	2.58	0.05	1.00	-	-	-	-	-
3. Living a Calling	1390	2.6	1.47	0.53**	-0.10**	1.00	-	-	-	-
4. Job Satisfaction	921	2.02	1.12	0.14**	-0.26**	0.32**	1.00	-	-	-
5. Purpose in Life	1412	1.51	0.87	0.26**	0.02	0.24**	0.13**	1.00	-	-
6. Hope for the Future	1413	1.81	1.01	0.21**	-0.04	0.21**	0.31**	0.44**	1.00	-
7. Importance of God or Spirituality	1400	3.3	1.35	0.25**	0.05*	0.23**	0.06	0.42**	0.17**	1.00

Note: * = $p < .05$, ** = $p < .01$

Table 5

Odds ratios and 95% confidence intervals (95% CI) from hierarchical logistic regression analysis modeling the association between living a calling and job satisfaction, adjusting for source of calling and spirituality, Portraits of American Life Study, Wave 2, 2012.

Hierarchical Model	Odds Ratio	95% CI	p-value
Model 1: Living a Calling	6.7	3.94-11.4	<0.001
Model 2: Living a Calling and Source of Calling	-	-	-
Living a Calling	6.85	3.83, 12.3	<0.001
External and Internal source of calling	Reference	-	-
External source of calling	0.45	0.14, 1.39	0.16
Internal source of calling	1.13	0.59, 2.17	0.71
Model 3: Living a Calling and Source of Calling	-	-	-
Living a Calling	7.72	3.60, 16.6	<0.001
External and Internal source of calling	Reference	-	-
External source of calling	1.7	0.40, 7.20	0.47
Internal source of calling	1.13	0.50, 2.53	0.77
Interaction: Living a calling and external source of calling	0.15	0.02, 0.92	0.04
Interaction: Living a calling and internal source of calling	1.1	0.30, 4.01	0.88
Model 4: Living a Calling, Source of Calling and Spirituality	-	-	-
Living a Calling	7.25	3.46, 15.2	<0.001
External and Internal source of calling	Reference	-	-
External source of calling	1.5	0.37, 6.15	0.57
Internal source of calling	1.29	0.51, 3.26	0.59
Spirituality is extremely or most important in my life	Reference	-	-
Spirituality is very important in my life	1.12	0.53, 2.35	0.76
Spirituality is somewhat important in my life	0.54	0.25, 1.18	0.12
Spirituality is not at all important in my life	0.96	0.27, 3.37	0.94
Interaction: Living a calling and external source of calling	0.16	0.03, 0.97	0.04
Interaction: Living a calling and internal source of calling	1.14	0.31, 4.16	0.84

Table 6

Odds ratios and 95% confidence intervals (95% CI) from hierarchical logistic regression analysis modeling the association between living a calling and purpose in life, adjusting for source of calling and spirituality, Portraits of American Life Study, Wave 2, 2012.

Hierarchical Model	Odds Ratio	95% CI	p-value
Model 1: Living a Calling	3.36	1.98-5.69	<0.001
Model 2: Living a Calling and Source of Calling	-	-	-
Living a Calling	2.34	1.19, 4.63	0.01
External and Internal source of calling	Reference		
External source of calling	3.49	0.95, 12.9	0.06
Internal source of calling	0.33	0.15, 0.73	0.01
Model 3: Living a Calling and Source of Calling	-	-	-
Living a Calling	1.7	0.42, 6.86	0.45
External and Internal source of calling	Reference	-	-
External source of calling	2.2	0.40, 12.1	0.36
Internal source of calling	0.27	0.08, 0.92	0.04
Interaction: Living a calling and external source of calling	2.27	0.18, 29.2	0.53
Interaction: Living a calling and internal source of calling	1.58	0.32, 7.90	0.58
Model 4: Living a Calling, Source of Calling and Spirituality	-	-	-
Living a Calling	0.8	0.18, 3.63	0.77
External and Internal source of calling	Reference	-	-
External source of calling	0.64	0.11, 3.84	0.63
Internal source of calling	0.54	0.13, 2.24	0.39
Spirituality is extremely or most important in my life	Reference	-	-
Spirituality is very important in my life	0.17	0.05, 0.60	0.01
Spirituality is somewhat important in my life	0.06	0.02, 0.20	<0.001
Spirituality is not at all important in my life	0.02	0.01, 0.08	<0.001
Interaction: Living a calling and external source of calling	3.48	0.26, 46.0	0.34
Interaction: Living a calling and internal source of calling	2.45	0.43, 14.1	0.31

Table 7

Odds ratios and 95% confidence intervals (95% CI) from hierarchical logistic regression analysis modeling the association between living a calling and hope for the future, adjusting for source of calling and spirituality, Portraits of American Life Study, Wave 2, 2012.

Hierarchical Model	Odds Ratio	95% CI	p-value
Model 1: Living a Calling	3.29	2.19-4.94	<0.001
Model 2: Living a Calling and Source of Calling	-	-	-
Living a Calling	2.34	1.40, 3.92	<0.001
External and Internal source of calling	Reference	-	-
External source of calling	1.51	0.56, 4.10	0.42
Internal source of calling	0.65	0.38, 1.13	0.13
Model 3: Living a Calling and Source of Calling	-	-	-
Living a Calling	2.07	0.95, 4.52	0.07
External and Internal source of calling	Reference	-	-
External source of calling	2.16	0.56, 8.36	0.26
Internal source of calling	0.58	0.25, 1.37	0.21
Interaction: Living a calling and external source of calling	0.63	0.11, 3.80	0.62
Interaction: Living a calling and internal source of calling	1.32	0.41, 4.21	0.64
Model 4: Living a Calling, Source of Calling and Spirituality	-	-	-
Living a Calling	1.76	0.83, 3.73	0.14
External and Internal source of calling	Reference	-	-
External source of calling	1.66	0.44, 6.22	0.45
Internal source of calling	0.77	0.31, 1.88	0.56
Spirituality is extremely or most important in my life	Reference	-	-
Spirituality is very important in my life	0.75	0.40, 1.38	0.35
Spirituality is somewhat important in my life	0.47	0.23, 0.98	0.04
Spirituality is not at all important in my life	0.41	0.17, 1.01	0.05
Interaction: Living a calling and external source of calling	0.71	0.12, 4.23	0.7
Interaction: Living a calling and internal source of calling	1.36	0.43, 4.34	0.6

FIGURES

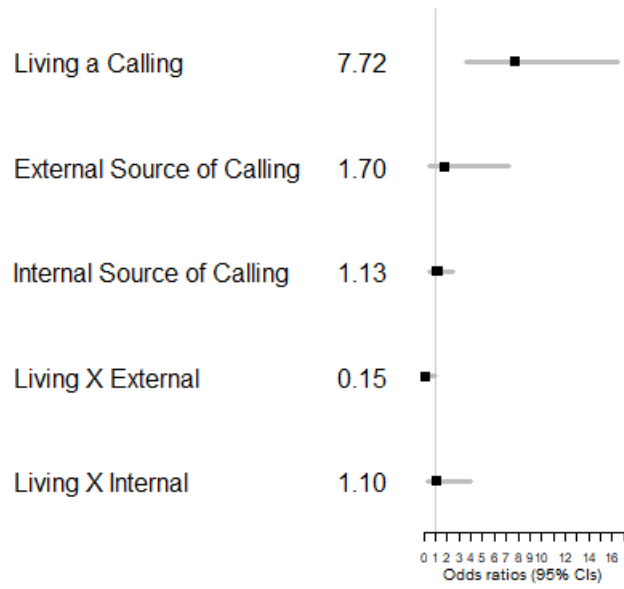


Figure 1. Odds ratios and 95% confidence intervals of living a calling and source of calling in predicting job satisfaction.

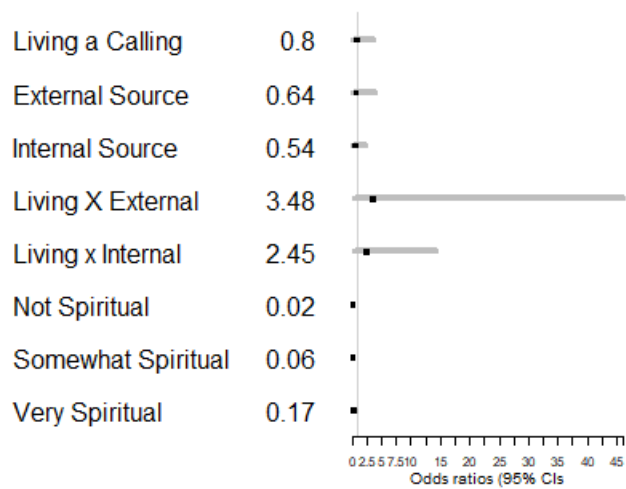


Figure 2. Odds ratios and 95% confidence intervals of living a calling, source of calling, and the importance of spirituality in predicting purpose in life.

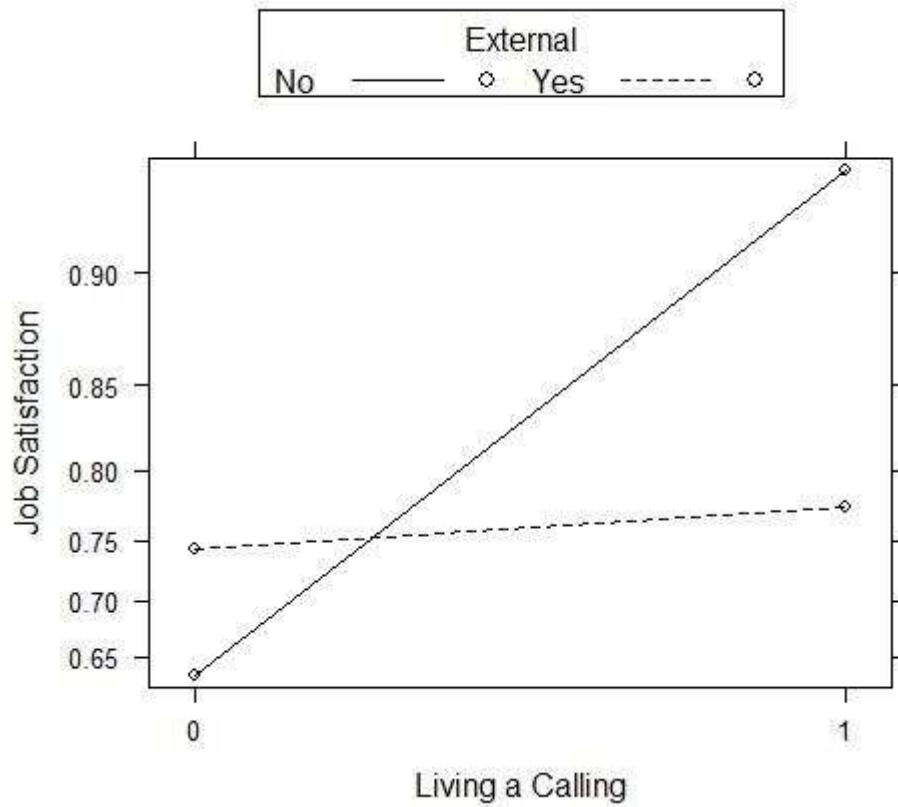


Figure 3. The interaction between living a calling and source group in predicting job satisfaction, comparing those who endorsed an external source of calling compared to those who did not.

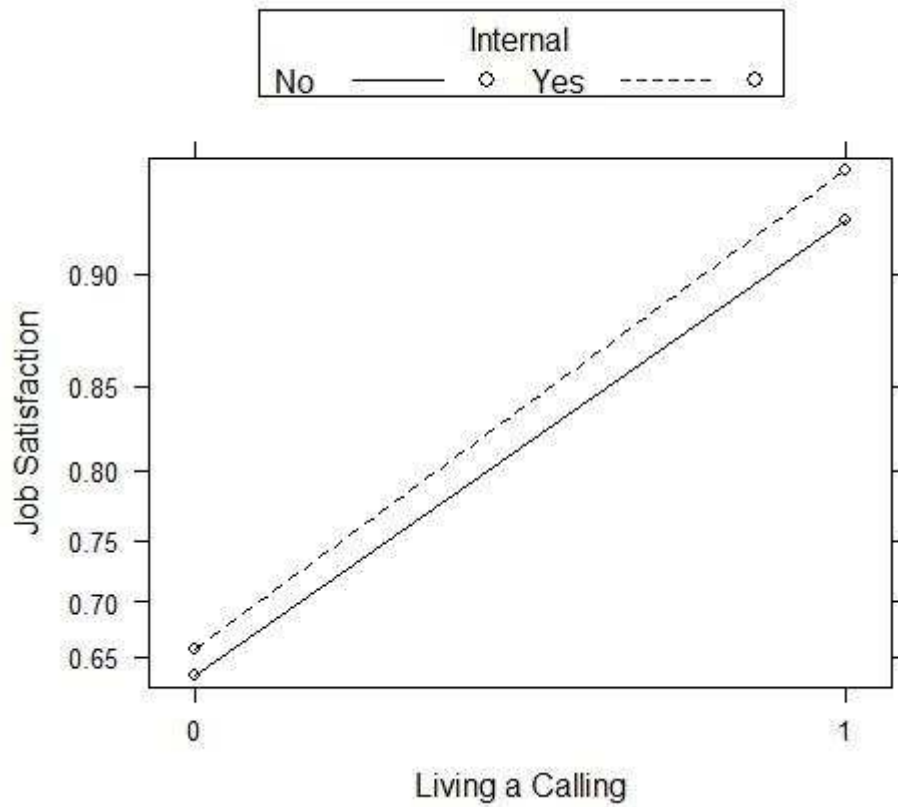


Figure 4. The interaction between living a calling and source group in predicting job satisfaction, comparing those who endorsed an internal source of calling compared to those who did not.

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