A SIREN SONG? A LONGITUDINAL STUDY OF THE ROLE OF CALLING AND PERCEIVED ABILITY IN MUSICIANS' CAREER PURSUIT

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ABSTRACT

In a seven-year, four-wave longitudinal study of 450 musicians, we found that people with stronger early callings perceived their abilities especially favorably and pursued music professionally, whereas those with weaker early callings perceived their abilities less favorably and did not pursue music professionally—regardless of their objective musical ability.

INTRODUCTION

Every year, approximately 3,000 orchestral instrument majors graduate from U.S. conservatories and college music programs while only 150 orchestra job openings are available (0.5%) (Druckenbrod, 2005). Only 10% to 15% of graduates of top U. S. conservatories such as The Juilliard School find full-time employment in music upon graduation. Moreover, by 10 years after graduation, over 30% leave music performance altogether, sometimes selling their valuable musical instruments to make ends meet financially (Wakin, 2004). For musicians who manage to find professional music employment, the median salary is lower than the median salary for professional occupations in general (\$36,290 vs. \$38,809) and 39% hold secondary jobs outside their primary occupation (i.e., music) compared to only about 5% for other professionals (National Endowment for the Arts, 2004). Further, in a study of job satisfaction across 13 different occupations, professional orchestra musicians ranked relatively low—just below federal prison guards (Allmendinger, Hackman, & Lehman, 1996). The news that the Philadelphia Orchestra, one of the world's leading orchestras, declared bankruptcy in 2011 further demonstrates the shaky ground aspiring musicians face (Wakin, 2011). In sum, by both objective and subjective standards, professional music is a challenging career path.

Aspiring young musicians receive numerous warnings about the challenges of the career path that awaits them. A common saying in the music world is "Do music if it's the only thing you can do." A professional conductor echoed this sentiment: "Everyone who chooses *not* to go into music has made the right decision. If you don't need it, you shouldn't do it. The desire to do music has to be coming out of you in an urgent way." These examples raise a fundamental question about the psychology underlying career pursuit: how can we explain the choice of so many young musicians to pursue a career path in which the odds of objective success are so low? The goal of our study is to address this puzzle.

We propose that a particular psychological orientation—a sense of *calling*—helps explain the puzzle of people's seemingly irrational career pursuit attempts. This "consuming, meaningful passion people experience toward a domain" (Dobrow & Tosti-Kharas, 2011) such as music is correlated with a variety of career variables (e.g., Dobrow & Tosti-Kharas, 2011; Duffy & Sedlacek, 2007; Rosso, Dekas, & Wrzesniewski, 2010) and can be "answered" or "unanswered" (Berg, Grant, & Johnson, 2010). However, research has not yet connected calling, which is generally viewed as a highly positive construct in the management literature, to actual career pursuit. Building on positive illusion and motivation research, we propose that one path by which calling leads to career pursuit is through enhanced assessment of one's own abilities. If people experience a strong calling toward a domain, they perceive their own ability in this domain as high regardless of their actual ability, and then pursue a career in the domain based on their selfassessment. We thus suggest a calling may be a Siren song: it can be extremely enchanting and enticing, but if not navigated carefully, it can result in career shipwreck.

Examples from the music domain demonstrate the proposed connection between calling, high perceived ability, and risky career pursuit. Millions of television viewers tune in to watch the auditions of passionate but "dreadfully bad singers on *American Idol* [who] seem genuinely surprised to hear negative feedback regarding their singing abilities (or lack thereof)" (Saad, 2009). Similarly, regarding aspiring classical musicians, a *New York Times* article suggested that "[m]aybe going to a conservatory is like being a compulsive gambler: It is one big bet, but the drive to study music is so blinding, and doing anything else so inconceivable, that young players are oblivious to the risk. Sometimes it is hard to determine whether they are driven by single-mindedness or they live in self-denial" (Wakin, 2004).

In this study, we take a step toward filling this gap in the theoretical and empirical understanding of the relationship between callings and career pursuit, particularly in a challenging labor market such as music. We present the results of a seven-year, four-wave longitudinal study of a sample of 450 amateur high-school musicians progressing from high school to college to early career. Specifically, we propose that experiencing a calling toward music will be positively associated with music career pursuit over time. We expect individuals' self-perceptions of their ability in music, above and beyond the effects of early musical ability perceptions and actual ability level, will mediate the link between calling and career pursuit.

THEORETICAL BACKGROUND

Calling and Career Pursuit

This longitudinal study addresses theoretical gaps in our understanding of calling by proposing a model of the role of calling in people's careers, particularly as it relates to pursuit of a career path in the domain of the calling. By definition, career phenomena occur over time (Hall, 2002). Researchers must therefore take temporality into account in both their theories and methodologies (e.g., Barley, 1989; Hall, 2002; Ployhart & Vandenberg, 2010). Because calling is a career phenomenon, we expect individual differences in calling to exert long-term influence—that is, over many years—on career outcomes (Dobrow, 2011; Dobrow & Tosti-Kharas, 2011, In press; Duffy et al., 2011b).

Hypothesis 1: The degree of early calling toward a domain will positively predict music career pursuit many years later, above and beyond the effects of early

perceived and objective abilities.

Calling and Perceived Ability

We suggest that one means by which calling can lead to career pursuit is through enhanced self-perceived ability in the calling domain. Despite the importance of calling in career pursuit, people often have difficulty perceiving their abilities accurately, as evidenced by a body of research documenting people's overly optimistic assessments of their own abilities (e.g., Alicke & Govorun, 2005; Dunning, 2005; Ehrlinger, Johnson, Banner, Dunning, & Kruger, 2008; Kruger & Dunning, 1999). Empirical work in this area has focused on the inaccuracies people display (e.g., Alicke, 1985; Kruger & Dunning, 1999; Weinstein, 1980), distinguishing different types of overconfidence (Moore & Healy, 2008), and investigating the impact of task difficulty on overconfidence (e.g., Larrick, Burson, & Soll, 2007). However, scholars have called for increased understanding of *why* these inaccuracies occur (Ashford, 1989; Klayman, Soll, González-Vallejo, & Barlas, 1999), particularly from a motivational angle (Ehrlinger et al., 2008). We propose that calling may be one such factor that fosters overly optimistic perceived ability.

Hypothesis 2: The degree of early calling toward a domain will predict an increase in perceived musical ability several years later, above and beyond the effects of early perceived and objective abilities.

Mediating Effects of Perceived Ability

We expect perceived ability about a given domain to lead to career pursuit in that domain for several reasons. Individuals' beliefs about their abilities are "tantamount to a desire to use that skill" and so are reflected in occupational preferences and choices (Vroom, 1964: 86). Indeed, self-assessments of abilities can predict career success over several years (Braun, Sheikh, & Hannover, 2011). Ashford (1989) emphasized the importance of the connection between self-assessment and career outcomes: "When making decisions about how intensely to work and how to allocate their efforts in making major career decisions, self-assessments of strengths, weaknesses, and the success of previous performances play an important role in individuals' abilities to regulate their behavior successfully" (p. 135). These self-assessments are especially critical during periods of ambiguity, such as during career or organizational changes (Ashford, 1989) and in highly competitive domains (Frank & Cook, 1995).

Building on this importance of perceived ability in predicting career outcomes, as well as the rationales for Hypotheses 1 and 2, we propose that perceived ability partially mediates the relationship between calling and music career pursuit. That is, we suggest young musicians believe that the stronger their sense of calling is, the greater their abilities are, regardless of their objective ability. Given this high level of perceived ability, these individuals believe they will be one of the lucky few to beat the odds and will therefore pursue a career in music.

Hypothesis 3: The relationship between the degree of early calling toward a domain and career pursuit in this domain many years later will be partially mediated by perceived ability several years later, above and beyond the effects of early perceived and objective abilities.

METHOD

Sample and Procedure

Participants were 450 students at two premier U.S. high-school summer music programs. We administered surveys in four waves over the course of seven years (total number of surveys = 1,336). The first two surveys in the study, "Time 1" (n = 426) and "Time 2" (n = 342), were completed at the beginning and end of the summer music programs in 2001, respectively. The Time 3 survey occurred three and a half years later (n = 305; response rate = 68%). The Time 4 survey occurred after another three and a half years (n = 262; response rate = 64%). Response rates are calculated based on the number of people contacted in each wave of the study. The surveys included measures of calling, perceived ability, career-related behaviors, cognitions, affect, and general background. The summer programs provided data about participants' objective musical ability from their archives.

This data collection period spanned participants' high school years (Times 1 and 2) through graduation from college and the start of graduate school or employment (Time 4). We conducted two attrition analyses to compare respondents and nonrespondents. These analyses highlight that attrition in this sample is not systematic with regard to our focal variables.

Measures

Calling. We measured calling with Dobrow and Tosti-Kharas' (2011) 12-item scale on the Times 1 and 2 surveys. This scale assesses individuals' calling toward a specific domain, such as music. Participants rated items such as "I am passionate about playing my instrument/singing" and "My existence would be much less meaningful without my involvement in music" on a 7-point scale ($1 = strongly \ disagree$, $7 = strongly \ agree$). We averaged the 12 items to create the scale (possible range of $1 = weak \ calling$ to $7 = strong \ calling$; Cronbach's alpha = .88 and .89 at Times 1 and 2).

Music career pursuit. In the context of pre-career individuals, such as students, we expect calling to be linked with two indicators of professional pursuit of the calling domain: attending a college program in the calling domain and intending to pursue the calling domain professionally. We thus assessed participants' pursuit of a music career in these two ways.

First, as an objective behavioral indicator of music career pursuit, we used *college program choice* (categorized as music oriented or non–music oriented). Second, using a twoitem scale, we assessed participants' *behavioral intentions* regarding music career pursuit on the Time 4 survey. We asked participants, "Are you or do you intend to be a professional musician?" (2 = yes, 1 = maybe, 0 = no) and they rated the item "My career goal is to be a professional musician?" on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Values on this scale (Cronbach's alpha = .95) represent an individual's behavioral intentions regarding pursuit of a music career relative to others in the sample (i.e., the individual's number of standard deviations above or below the mean).

Perceived ability. We measured participants' subjective assessment of their own abilities at Time 3 with a two-item scale that captured their general sense of their musical abilities and

expectations for success. Consistent with other measures of perceived ability (e.g., Ackerman, Beier, & Bowen, 2002; Ehrlinger et al., 2008), our survey prompted participants to think about their peers in the same musical specialty at the 2001 summer music program. We then asked them how they would compare themselves to this group of people: (1) "How likely is it that you could get a professional job in your musical specialty quickly out of school (regardless of whether this is what you want or not)?" (2) "How talented are you?" (5-point scale, 1 = much *less than others*, 5 = much *more than others*). We averaged the two items to create the perceived ability scale (Cronbach's alpha = .79).

Control Variables

In all analyses, we controlled for gender, age in years at Time 1, ethnicity, family socioeconomic status, and type of musical involvement. We also controlled in all analyses for a potentially confounding variable: objective music ability. We used a measure of objective ability critical for distinguishing musicians from one another: audition ratings. Expert judges rated applicants' live or taped admission auditions for the summer music programs in 2001. Lastly, we controlled for early perceived ability in all analyses, enabling us to effectively examine the antecedents and outcomes of change in perceived music ability perceptions from high school to college over the span of three and a half years (i.e., from Times 1 and 2 to 3). We assessed perceived ability at Times 1 and 2 using the same two-item scale as at Time 3 and used the average of these two measures (r = .60) in our analyses.

RESULTS

Supporting Hypothesis 1, the logit regression analyses indicate a significant and positive association between early calling and college program choice several years later, controlling for early perceived ability, objective ability, and other individual characteristics ($\beta = .72$, p < .001). Lending further support to Hypothesis 1, the multiple regression analyses indicate a significant and positive association between calling and the second career-pursuit indicator (behavioral intentions) seven years later, controlling for early perceived ability, objective ability, and other individual characteristics (standardized $\beta = .28$, p < .001).

In support of Hypothesis 2, early calling was significantly and positively associated with perceived ability three and a half years later, controlling for early perceived ability, objective ability, and other individual characteristics (standardized $\beta = .17$, p < .01).

We tested Hypothesis 3, our mediation hypothesis, using two approaches: the traditional four-step approach (Baron & Kenny, 1986; MacKinnon, Fairchild, & Fritz, 2007) and indirect effects analysis (Preacher & Hayes, 2008). First, using Baron and Kenny's (1986) method, we established that early calling was significantly associated with the outcomes, both indicators of music career pursuit (Hypothesis 1). Second, we demonstrated that early calling related significantly to the proposed mediator, perceived ability (Hypothesis 2). Third, in our full model, the proposed mediator, perceived ability, was significantly and positively related to both indicators of music career pursuit (the outcomes), controlling for early calling ($\beta = 1.07$, p < .001 for college program choice; and standardized $\beta = .52$, p < .001 for behavioral intentions). Finally, the relationship between early calling and college program choice decreased from .72 to .61 (a 15% decline) and the relationship between early calling for the proposed mediator, perceived ability. Thus

the first three steps of the test for mediation were fulfilled. That the fourth step indicates decreases in the effect of calling on both dependent variables, but not to zero, suggests the existence of partial, rather than full, mediation. We can conclude from these steps that as expected, perceived ability partially mediates the relationship between early calling and music career pursuit. We supplemented our mediation test with an indirect effects test using Preacher and Hayes's (2008) bootstrapping approach, which showed perceived ability is a mediator of the relationship between early calling and both indicators of music career pursuit. In sum, both approaches for testing mediation converge to support the hypothesis that perceived ability mediates the link between early calling and music career pursuit.

DISCUSSION AND CONCLUSION

These findings shed light on a puzzle in the careers and calling literatures: why do people pursue high-risk careers? In a seven-year, four-wave longitudinal study of musicians spanning a critical time period for career decision-making, we found that experiencing a strong calling toward a domain encourages people to perceive their abilities in that domain especially positively and to pursue a career in that domain, regardless of their objective ability. In our longitudinal methodology, we measured calling during high school (Times 1 and 2), perceived ability three and a half years later during college (Time 3), and career pursuit an additional three and a half years later (Time 4). Further, our measure of objective musical ability came from archival data measured prior to Time 1. This design provides powerful support for our overall theoretical model by focusing on psychologically meaningful time periods representing important career milestones: before, during and after college. Furthermore, temporally separating the constructs and using a combination of sources largely reduces concerns regarding commonmethod bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Moreover, we tested the direction of causality between early calling and perceived ability and found support for the hypothesized notion that calling leads to perceived ability rather than the reverse.

This study demonstrates that calling leads to career pursuit, both directly and through enhancing ability perceptions. These results describe people's behaviors controlling for their objective ability in music, which highlights that in an already-risky profession such as music, the career paths that await individuals experiencing strong callings without equally strong abilities may be especially risky. If a calling, like the song of the Sirens, can be so alluring yet also set up potentially risky outcomes, should individuals strive to pursue or avoid fulfilling it? Is it better to avoid calling's Siren song altogether or to learn to navigate the dangerous career waters that swirl around the Sirens? Odysseus avoided the dangers of the Sirens thanks to the sage advice he received from the Sorceress Circe. Social support factors may play a similarly powerful role in safely steering pursuit of a calling. Future research should examine the complex trade-offs involved in decisions to pursue or not pursue callings in high-risk domains via a broader range of affective, behavioral, and cognitive outcomes. As such, it can contribute toward painting the intricate picture of calling in both its bright and dark colors.

REFERENCES AVAILABLE FROM THE AUTHORS