

Moderators of Career Calling and Job-Search Behaviors Among Unemployed Individuals

Anna Dalla Rosa, Michelangelo Vianello,
Elisa Maria Galliani, and Ryan D. Duffy

We examined the relationship between calling, job-search clarity, and job-search intensity in a cross-sectional study of Italian unemployed job seekers ($N = 315$). Structural equation modeling with observed variables and latent moderated structural equation models were adopted to test whether optimism, self-esteem, and perseverance moderate the relation between calling, job-search clarity, and job-search intensity. Perceiving a calling was positively related with job-search clarity and intensity, and these relations were stronger in individuals with lower levels of optimism, self-esteem, and perseverance. This study suggests that perceiving a calling is an important personal resource that is related to a clearer job-search goal and to more intense job-search activities and can support job seekers in personal adverse conditions. These results suggest integrating job-search behaviors in the work-as-calling theory and that incorporating the construct of calling into career counselors' practices may increase the efficacy of job-search activities.

Keywords: calling, job search, optimism, self-esteem, perseverance

People who perceive a calling feel that there is a specific type of work that allows them to derive personal meaning and help others. In the current study, we draw from the work-as-calling theory (WCT; Duffy et al., 2018) and adopt the definition of *calling* “as an approach to work that reflects seeking a sense of overall purpose and meaning and is used to help others or contribute to the common good, motivated by an external or internal summons” (Duffy et al., 2018, p. 426). Perceiving a calling has been associated with positive outcomes for individuals and organizations, such as career commitment, work engagement, and job and life satisfaction (Dalla Rosa et al., 2014, 2017; Duffy et al., 2018; Vianello et al., 2018). However, studies have demonstrated that an unrealized calling has negative consequences (e.g., Gazica & Spector, 2015) and that the full benefits of a calling cannot be realized unless individuals live and realize their calling at work. Indeed, the relations of perceiving a calling with career commitment and work meaning are more robust for those who are living their calling (Duffy, Bott, et al., 2012), and the relation of perceiving a calling to life satisfaction was found to be fully mediated by living a calling (Duffy et al., 2013).

Authors' Note. The data that support the findings of this study are openly available in the Open Science Framework (<https://doi.org/10.17605/OSF.IO/SXQA9>). Please contact the corresponding author with questions regarding the survey or data.

Anna Dalla Rosa, Michelangelo Vianello, and Elisa Maria Galliani, Department of Philosophy, Sociology, Education and Applied Psychology, University of Padova; Ryan D. Duffy, Department of Psychology, University of Florida at Gainesville. Correspondence concerning this article should be addressed to Anna Dalla Rosa, Department of Philosophy, Sociology, Education and Applied Psychology, University of Padova, via Venezia 14, 35131, Padova, Italy (email: anna.dallarosa@unipd.it).

© 2020 by the National Career Development Association. All rights reserved.

WCT proposes that, to live out a calling, individuals should perceive a match between their personal characteristics and their work—that is, person-environment (P-E) fit. For instance, job crafting is hypothesized to moderate the link between perceiving a calling and P-E fit. People can change the relational, behavioral, and cognitive engagements involved in their work to pursue a better fit to their calling (Duffy et al., 2018, 2019).

However, this process does not help to explain how individuals who perceive a calling but do not have a job behave to pursue their calling. It has been argued that the meaning people attach to working shapes their goals and outcomes during job search and that the level of calling might be related to job-search propensity. Previous work has demonstrated that people can perceive a calling regardless of their employment status: Both Duffy et al. (2015) and Torrey and Duffy (2012) observed no significant differences in perceiving a calling between employed and involuntarily unemployed adults. On the contrary, involuntarily unemployed adults were found to be significantly less likely to feel that they are living a calling (Duffy et al., 2015).

WCT suggests that individuals tend to seek employment in a job that aligns with their calling and that, consequently, job choice can be affected by the presence of a calling. However, WCT does not formally discuss how job-search behaviors are related to perceiving a calling, a limitation that we sought to address in the current study. Specifically, we examined the notion that perceiving a calling is related to clearer career goals and to more effortful job-search activities. In addition, drawing from previous evidence suggesting that optimism, self-efficacy, and perseverance foster more effective job-search behaviors (Kanfer et al., 2001), we examined these traits as moderators in the relations between perceiving a calling, job-search clarity, and job-search intensity. Considering the social and psychological costs of unemployment, such as lower psychological and physical well-being (McKee-Ryan et al., 2005), our findings may be relevant to practitioners because calling may function as a motivator of job-search behaviors.

Career Calling and Job-Search Behaviors

The presence of a calling predicts the intention to pursue a career. Individuals with a stronger calling are more likely to pursue it in their job regardless of their actual ability in the domain (Dobrow & Heller, 2015) and regardless of the discouraging career advice they receive (Dobrow & Tosti-Kharas, 2012). Individuals who perceive a calling invest more in their career preparation and are ready to cope with problems in their career path (Dobrow & Heller, 2015; Duffy et al., 2014, 2015; Praskova et al., 2014).

WCT suggests that P-E fit mediates the transition from perceiving a calling to living it out. The experience of perceiving a calling is ideally action oriented in that it provides a clear purpose (Elangovan et al., 2010). Accordingly, unemployed individuals who perceive a calling may be motivated to seek out a work opportunity that fits their calling by searching for an occupation where this fit is likely to exist.

Job-search behaviors define how effectively individuals look for a job and have a strong impact on outcomes, such as employment status and quality of employment. Although job-search behaviors are not specifically included in WCT, it is suggested that job choice is a means by which P-E fit is achieved. In the current study, two specific aspects of the job-search

process were considered: job-search clarity (Wanberg et al., 2002) and job-search intensity (Blau, 1993). *Job-search clarity* indicates the extent to which job seekers have clear ideas regarding their job-search objectives and the type of career that they want to pursue. Individuals without clear job objectives are affected by a lack of specific work-related information, have little awareness of their interests, and perceive a general difficulty in making decisions and choices (Wanberg et al., 2002). Without a clear goal, individuals may take longer to find work or may be more likely to accept the first job offer they receive, which may not fit their interests (Wanberg et al., 2002). *Job-search intensity* indicates the amount of time and effort invested in the job-search process. Higher job-search intensity leads to faster employment and higher employment quality because it allows individuals to identify more job options and choose the best one (Kanfer et al., 2001).

Optimism, Self-Esteem, and Perseverance

Job seekers undertake a variety of activities and use their personal resources for the purpose of obtaining employment. These activities are influenced by an interplay of factors, such as employment motives, personal characteristics, and situational conditions (Kanfer et al., 2001). Among these, individual differences in expectations, self-evaluation, and personality play a key role as antecedents of job search. In this study, we focused on optimism, self-esteem, and perseverance because they are important psychological resources and predictors of effective job-search behaviors (Kanfer et al., 2001).

Optimism is a personal disposition to expect that positive outcomes will occur (Scheier et al., 1994), and it is likely to influence individuals' behaviors and performance (Bandura, 1977; Medlin & Green, 2009). Individuals with high optimism are more oriented to exerting continuous effort in job-search activity because they believe that the desired outcome is attainable. In addition, they are likely to attribute the causes of their job loss to external and temporary situations, which allows them to believe that they are employable and that their reemployment is within their control (Chen & Lim, 2012).

Self-esteem is the overall evaluation of self-worth, value, or importance (Blascovich & Tomaka, 1991). Individuals with high levels of self-esteem are more likely to persist at difficult tasks (such as keep looking for a job despite rejections) and to adjust to stressful life situations such as unemployment. In a meta-analysis, Kanfer et al. (2001) found self-esteem to be related to increased job-search intensity, a shorter unemployment period, and a greater likelihood of obtaining employment and receiving job offers.

Perseverance refers to the capability of fulfilling one's own tasks and commitments (Barrick & Mount, 1991). It is plausible that individuals who are low in perseverance will tire quickly from the demands and effort necessary to find a job and will give up soon in the job-search process. Indeed, individuals with high thoroughness and perseverance engage in more proactive job-search behaviors, such as gathering information and building relationships with potential employers (Kanfer et al., 2001; Schmit et al., 1993).

Purpose of the Study

Job search is typically viewed as a self-motivated goal-oriented activity influenced by the environment (Boswell et al., 2012; Kanfer et al., 2001).

Empirical evidence has shown that job search is facilitated by clear goals. Wanberg et al. (2002) found that job clarity is related to higher levels of job-organization fit and lower levels of turnover intention later on. Côté et al. (2006) found that job seekers with high clarity are more likely to obtain employment because they engage in more search behaviors and obtain more job interviews and offers. Liu et al. (2014) observed that job-search interventions promoting goal setting are more effective than interventions that did not include such components in helping people to obtain employment.

Realizing a calling at work is a specific and clear goal that directs individuals' attention and sustains individuals' effort (Dobrow & Heller, 2015; Praskova et al., 2014). As with any other goal, its effectiveness in regulating behavior and performance depends on how clear it is (Locke & Latham, 1990). Hence, stronger callings should be more effective in regulating goal-relevant behavior, such as looking for a job in which the calling can be actualized. We argue that when a person is looking for a job, the presence of a calling will provide the direction of the action and a clear job-search objective.

WCT suggests that individuals who perceive a calling are more motivated to invest energy and time trying to live it out. Therefore, we predicted that the presence of a calling is positively related with job-search intensity. We tested the following hypotheses:

Hypothesis 1: The presence of a calling is positively related with job-search clarity.

Hypothesis 2: The presence of a calling is positively related with job-search intensity.

The strength of the relation between calling and job-search clarity and intensity is expected to be influenced by individuals' characteristics. Individuals with high levels of optimism, self-esteem, and perseverance are expected to exert continuous effort in job-search activity, to invest more time and energy in the job-search process, and to possess clearer job-search aims. Therefore, the relations between perceiving a calling and job-search clarity and intensity are proposed to be stronger for individuals with higher levels of these personal characteristics. The following hypotheses were also examined:

Hypotheses 3: Optimism moderates the relation between calling and job-search clarity (Hypothesis 3a) and job-search intensity (Hypothesis 3b).

Hypotheses 4: Self-esteem moderates the relation between calling and job-search clarity (Hypothesis 4a) and job-search intensity (Hypothesis 4b).

Hypotheses 5: Perseverance moderates the relation between calling and job-search clarity (Hypothesis 5a) and job-search intensity (Hypothesis 5b).

In testing these hypotheses, we controlled for the effects of age, gender, and unemployment status, given that these variables were shown to be related to job-search behaviors and are routinely included as control variables in studies of job seeking (Kanfer et al., 2001).

Method

Participants and Procedure

The sample comprised 315 Italian unemployed job seekers (170 women, 145 men), of whom 31% were new entrants and 69% were jobless workers. Their ages ranged from 17 to 62 years ($M = 33.78$, $SD = 11.14$). Participants' highest level of education was as follows: elementary and middle school (12.2%), high school (51.3%), bachelor's degree (16.3%), master's degree (15.1%), and postgraduate degree (2.9%). Participants were looking for a job, on average, for 9 months ($Mdn = 3$, $SD = 14$) before data collection. Data were collected by means of a paper-and-pencil survey in private and public employment agencies in Italy. Only unemployed individuals who were actively seeking a job were invited to participate in the study. Data protection followed the regulations of Italy (Legislative Decree No. 196/2003) and of the European Union (EU Regulation 2016/679).

Measures

Except for the perseverance measure, which was developed and validated in Italian, all scales were translated using back-translation (Brislin, 1970).

Calling. The presence of a calling was assessed with the short version of the Presence of a Calling subscale of the Calling and Vocation Questionnaire (CVQ-Presence; Dik et al., 2012). The short CVQ-Presence measures transcendent summons, purposeful work, and prosocial orientation with nine items. Items were answered on a 5-point Likert scale ranging from 0 (*totally disagree*) to 4 (*totally agree*). Internal consistency of the scale was good ($\alpha = .82$). Evidence of convergent validity was provided by positive associations between CVQ-Presence and CVQ-Search and an alternative measure of calling. More details on the validity of the scale can be found at <https://osf.io/8jnw7/>. In the present study, internal consistency was .81.

Job-search clarity. Job-search clarity was assessed using the four-item scale developed by Wanberg et al. (2002). Items were answered on a 5-point Likert scale with endpoints of 0 (*totally disagree*) and 4 (*totally agree*). Wanberg et al. reported an internal consistency (Cronbach's alpha) of .85; in the present study, the Cronbach's alpha was .75.

Job-search intensity. Job-search intensity was measured with the nine items developed by Wanberg et al. (2002) asking participants to report how many times in the last 2 weeks they had done different job-search activities. The items were answered on a 5-point scale with response options ranging from 0 (*never*) to 4 (*very often*). Wanberg et al. reported an internal consistency (Cronbach's alpha) of .82, equal to the value found in the present study.

Optimism. State optimism was assessed with six items from the Revised Life Orientation Test (Scheier et al., 1994). Respondents were asked to indicate their agreement using a 5-point scale ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). The scale scores showed adequate internal consistency ($\alpha = .78$) and good test-retest reliability; the r value ranged from .56 to .79 (Scheier et al., 1994). Evidence of adequate convergent and discriminant validity was provided by positive correlations with measures of self-mastery and self-esteem and negative correlations with measures of neuroticism and trait anxiety (Scheier et al., 1994). In the present study, internal consistency was .69.

Self-esteem. Self-esteem was assessed with 12 items from the State Self-Esteem Scale (Heatherton & Polivy, 1991). Each item is scored on a 5-point scale (0 = *not at all*, 4 = *extremely*). Heatherton and Polivy (1991) reported high internal consistency ($\alpha = .92$). The scale possesses good convergent and discriminant validity, supported by positive correlations with alternative measures of self-esteem and satisfaction and negative correlations with measures of depression, anxiety, and hostility. In the present study, internal consistency was .91.

Perseverance. Perseverance was assessed with items from the Big Five Adjectives test (Barbaranelli et al., 2002). Participants were asked to rate how much five adjectives (e.g., “persevering”) described themselves on a 5-point scale with anchors of 0 (*not at all*) and 4 (*very much*). The Big Five Adjectives test scores possess adequate convergent and discriminant validity. The Perseverance subscale scores showed good internal consistency ($\alpha = .78$) and temporal stability over 2 weeks ($r = .81$). In the present study, the Cronbach’s alpha was .77.

Data Analysis

Hypotheses were tested using three path models in MPlus (Version 7; Muthén & Muthén, 2012), one model for each moderator to avoid multicollinearity among the moderator variables. Path analysis is a special case of structural equation modeling that contains observed variables only. Each model estimated the effects of calling, the moderator, and their interaction on job-search intensity and clarity. The effects of age, gender, and unemployment status (first-job seekers vs. jobless workers) on job-search intensity and clarity were included. Gender and unemployment status were dummy coded (0–1). Endogenous and exogenous variables were allowed to covary. Composite scores were created by averaging items from multi-item scales and standardized before the two-way product terms were computed (Finney et al., 1984). The models are saturated ($df = 0$); hence, they perfectly fit the observed variance-covariance matrix: comparative fit index (CFI) = 1, root-mean-square error of approximation (RMSEA) = 0, and standardized root-mean-square residual (SRMR) = 0.

A robustness analysis following the latent moderated structural equation modeling (LMS) approach was conducted to address two drawbacks inherent in any path analyses. Specifically, we used LMS to evaluate the fit of our models in a full latent variable framework and to understand whether our results are reproducible accounting for measurement error (Klein & Moosbrugger, 2000; Little et al., 2006; Maslowsky et al., 2015). The LMS approach considers the specific type of nonnormality implied by a latent interaction term and implements an iterative maximum likelihood estimation of model parameters by adapting the expectation-maximization algorithm. We did not use these models as primary analyses because they have many shortcomings. One shortcoming is that the correlation between the interaction term, calling, and the moderator cannot be modeled; thus, multicollinearity cannot be detected, which may result in unreliable estimates (Cheung & Lau, 2017). Therefore, we decided to rely on findings from the path models for testing our hypotheses and added LMS models as secondary analyses. Missing data were handled with the full information maximum likelihood estimation approach. The alpha level was set at .05.

Results

Table 1 presents the descriptive statistics, internal consistency estimates, and correlations for the study variables. In this sample, there were no multivariate outliers. No variables had skewness or kurtosis levels over 1. Perceiving a calling was positively related with job-search clarity, job-search intensity, perseverance, and optimism. The relation between perceiving a calling and self-esteem was nonsignificant.

Optimism

Having a calling had a significant effect on both job-search clarity ($\beta = .17, p = .001, R^2 = .19$) and intensity ($\beta = .20, p < .001, R^2 = .06$). Optimism had a significant effect on job-search clarity ($\beta = .27, p < .001$), and the interaction term had a significant effect on job-search clarity ($\beta = -.11, p = .04$). Optimism moderated the effect of calling on job-search clarity but not on job-search intensity.

Figure 1 presents the relation of calling with job-search clarity at low ($-1 SD$), average, and high ($+1 SD$) levels of optimism. Unexpectedly, the relation between calling and job-search clarity was positive and steeper when optimism was average or low. The positive effect of calling on job-search clarity was statistically significant for job seekers with low ($\beta = .21, p < .001$) and average ($\beta = .14, p = .003$) levels of optimism. The relation between calling and job-search clarity was not statistically different from zero for those with high levels of optimism ($\beta = .07, p = .23$).

Self-Esteem

Having a calling had a significant effect on job-search clarity ($\beta = .23, p < .001, R^2 = .24$) and intensity ($\beta = .19, p < .001, R^2 = .08$). Self-esteem had a significant effect on job-search clarity ($\beta = .37, p < .001$).

TABLE 1

Means, Standard Deviations, Internal Consistency Estimates, and Correlations for the Study Variables

Variable	1	2	3	4	5	6	7	8	9
1. Calling presence	.81								
2. Self-esteem	-.02	.91							
3. Optimism	.17**	.52**	.69						
4. Perseverance	.12*	.27**	.21**	.77					
5. Job-search clarity	.23**	.37**	.32**	.40**	.75				
6. Job-search intensity	.21**	.02	.01	.24**	.25**	.82			
7. Age	.03	.10	.05	.14*	.21**	-.08	—		
8. Gender ^a	.04	-.10	-.08	.14*	.08	.04	-.02	—	
9. Unemployment status ^b	-.12*	.03	-.02	.12*	.03	-.12*	.35**	-.08	—
<i>M</i>	2.47	2.80	2.32	2.30	2.02	2.77	33.78		
<i>SD</i>	0.72	0.71	0.64	0.60	0.79	0.82	11.14		

Note. Bolded coefficients on the diagonal are internal consistency estimates.

^aFor gender, 0 = male, 1 = female. ^bFor unemployment status, 0 = first-job seekers, 1 = job-less workers.

* $p < .05$. ** $p < .001$.

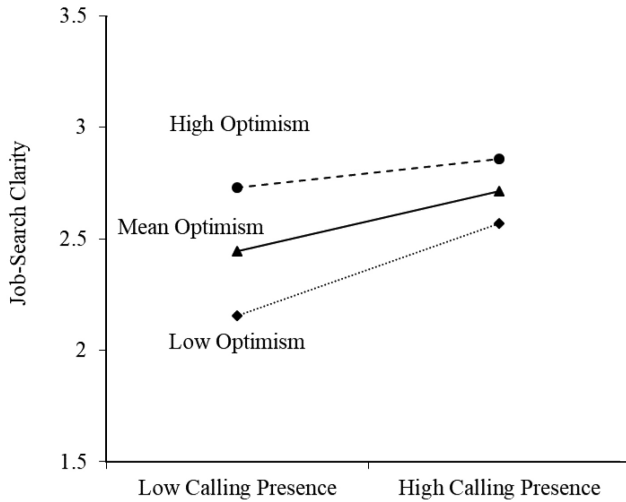


FIGURE 1
Significant Two-Way Interactions of Calling and Optimism in the Prediction of Job-Search Clarity

The interaction term had a significant effect on job-search intensity ($\beta = -.14, p = .01$) but not on job-search clarity ($\beta = -.09, p = .08$).

Figure 2 shows that, differently from our hypothesis, the relation between calling and job-search intensity was positive and stronger when self-esteem was average or low (1 *SD* below the mean). The relation between calling and job-search intensity was statistically significant for job seekers with low ($\beta = .26, p < .001$) and average ($\beta = .15, p = .001$)

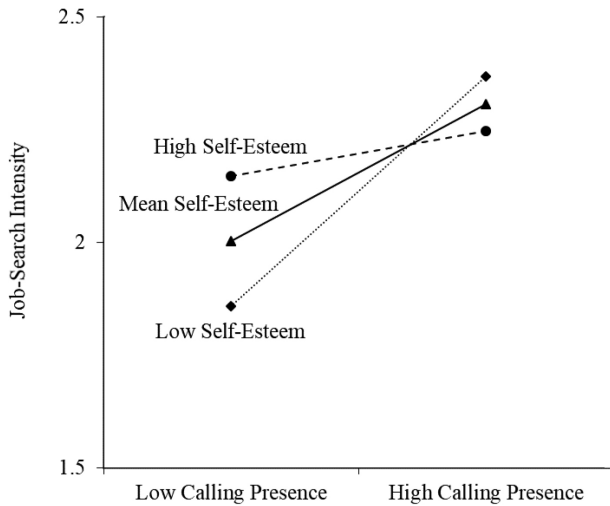


FIGURE 2
Significant Two-Way Interactions of Calling and Self-Esteem in the Prediction of Job-Search Intensity

levels of self-esteem. The gradient of the slope was not different from zero for individuals with a high level of self-esteem ($\beta = .05, p = .42$).

Perseverance

Having a calling had a significant effect on job-search clarity ($\beta = .17, p = .001, R^2 = .25$) and intensity ($\beta = .16, p = .002, R^2 = .14$). Perseverance had a significant effect on both job-search clarity ($\beta = .38, p < .001$) and intensity ($\beta = .26, p < .001$) as well as the interaction term (job-search clarity, $\beta = -.18, p < .001$; job-search intensity, $\beta = -.17, p = .001$). Figure 3 shows that the relations between calling and job-search clarity and intensity were positive and stronger when perseverance was average or low (1 *SD* below the mean), once again in partial contrast with our hypotheses. The relation between calling and job-search clarity and intensity was null at high levels of perseverance. The relation between calling and job-search clarity was significantly different from zero among job seekers with low ($\beta = .27, p < .001$) and average ($\beta = .14, p = .002$) levels of perseverance. The relation between calling and job-search clarity was not significant for those with high perseverance, $\beta = .01, t(308) = 0.18, p = .86$. The relation between calling and job-search intensity was significant among job seekers with low ($\beta = .25, p < .001$) and average ($\beta = .13, p = .004$) levels of perseverance; it was not significant for those with high perseverance ($\beta = .01, p = .92$).

Robustness Analysis

To evaluate data-model fit, we estimated three baseline models, one for each moderator, in a full latent variable approach. Model fit information was calculated without including the moderator effect and was evaluated as satisfactory on the basis of the following criteria: CFI $\geq .90$, RMSEA $\leq .08$, and SRMR $\leq .10$. First, the fit of the factor structure for the following constructs were found to be satisfactory: calling, $\chi^2(23) = 42.30, p < .001$, CFI = .97, RMSEA = .05, 95% confidence interval (CI) [.03, .08], SRMR = .04; optimism, $\chi^2(6) = 9.29, p = .16$, CFI = .99, RMSEA = .04, 95% CI [.00, .09], SRMR = .03; self-esteem, $\chi^2(47) = 90.71, p < .001$, CFI = .97, RMSEA = .06, 95% CI [.04, .07], SRMR = .04; perseverance, $\chi^2(4) = 5.78, p = .22$, CFI = .99, RMSEA = .04, 95% CI [.00, .10], SRMR = .02; job-search clarity, $\chi^2(2) = 0.81, p = .67$, CFI = 1, RMSEA = 0, 95% CI [.00, .09], SRMR = .01; and job-search intensity, $\chi^2(24) = 57.38, p < .001$, CFI = .95, RMSEA = .07, 95% CI [.04, .09], SRMR = .05.

Then, three baseline models were estimated, without the interaction effect on job-search clarity and intensity. The full latent structural equation model for the following constructs showed a good fit to the data: optimism, $\chi^2(406) = 677.67, p < .001$, CFI = .90, RMSEA = .05, 95% CI [.04, .05], SRMR = .07; self-esteem, $\chi^2(597) = 934.95, p < .001$, CFI = .92, RMSEA = .04, 95% CI [.04, .05], SRMR = .07; and perseverance, $\chi^2(379) = 583.33, p < .001$, CFI = .92, RMSEA = .04, 95% CI [.04, .05], SRMR = .06. In line with previous findings, perceiving a calling had a significant relation with both job-search clarity and intensity while controlling for each moderator. Optimism and self-esteem had a significant effect on job-search clarity, and perseverance had a significant relation with both job-search clarity and intensity. Results were compatible with those obtained with the path analysis.

After ensuring the fit of the full latent models, we added the latent interaction effects and tested them with the LMS approach. Findings

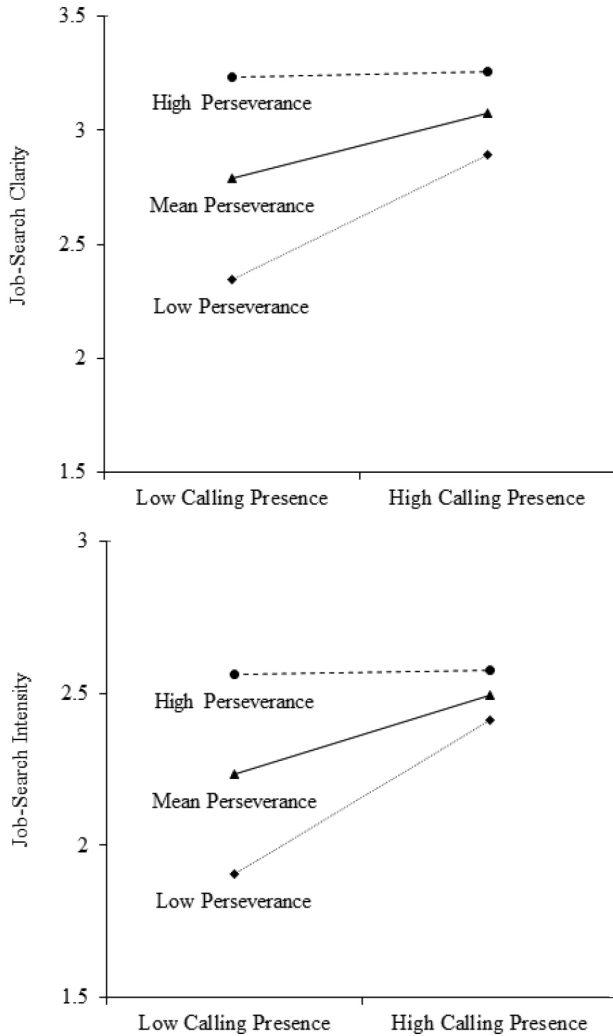


FIGURE 3
Significant Two-Way Interactions of Calling and Perseverance
in the Prediction of Job-Search Clarity (Top)
and Job-Search Intensity (Bottom)

were in the same direction as those yielded by our primary models. The variance accounted for (ΔR) by the interaction terms were .06 (optimism), .10 (self-esteem), and .22 (perseverance) for job-search clarity and .01 (optimism), .03 (self-esteem), and .07 (perseverance) for job-search intensity. These effects are larger than those yielded by the primary analysis.

Discussion

The goal of the current study was to examine the relations of calling with job-search behaviors. Perceiving a calling was found to be positively related to job-search clarity and intensity. Individuals with

a calling have clearer job-search goals and invest more energies in the job-seeking process. Four significant moderation effects were observed. Specifically, the relation between calling and job-search clarity depends on levels of optimism and perseverance, and the relation of calling with job-search intensity was moderated by self-esteem and perseverance. The direction of these effects is different from what we expected. The relations between calling, job-search clarity, and job-search intensity are weaker, rather than stronger, for participants with high optimism, self-esteem, and perseverance. When optimism and perseverance are low or average, perceiving a calling is positively related with clarity of job-seeking behavior. In addition, for individuals who are low or average in self-esteem and perseverance, the intensity of job-seeking behaviors increased as calling increased.

These results suggest that the quality and quantity of unemployed individuals' job-search behaviors are kept high by perceiving a calling when optimism, self-esteem, and perseverance are low and would therefore result in suboptimal job-search behaviors. In this sense, calling is an important personal resource that works as a protective factor, helping job seekers act effectively when their levels of optimism, self-esteem, and perseverance would make their job-seeking efforts less effective.

A similar effect of calling was observed on job and life satisfaction. Duffy, Allan, and Bott (2012) found that having a calling predicts greater life satisfaction for students with lower levels of core self-evaluations. Similarly, Duffy et al. (2016) found that the positive relation between living a calling and job satisfaction was greater for individuals in difficult working conditions. Taken together, these results suggest that having a calling is especially beneficial to individuals who have depleted personal resources or who are going through hard times, such as job loss or difficult working conditions.

Our results suggest considering the possibility of integrating job-search behaviors within WCT. Just as WCT postulates that individuals who perceive a calling customize their jobs to increase P-E fit (mediation effect of job-crafting behaviors), we propose that job-search behaviors mediate the association between perceiving a calling and P-E fit, at least when individuals are actively looking for a new job. Although the relation between perceiving a calling and P-E fit has been found to be from moderate to strong in size (Duffy et al., 2019), and previous studies have provided support for the relation between job-search behaviors and P-E fit (Cable & Judge, 1996; Saks & Ashforth, 2002), a direct test of the hypothesis of job-search behaviors as mediators between perceiving a calling and P-E fit is still lacking. It is hoped that future research will investigate this question.

Job-search interventions aimed at promoting goal setting are among the most effective approaches (Liu et al., 2014). Accordingly, career counselors who aim to assist job seekers should help them in setting up a clearly defined and reasonably high occupational goal (e.g., desired job type) rather than a vague objective (e.g., find a job soon). Finding a job that aligns with a calling can be a specific and challenging goal and should therefore have positive effects when added to an intervention. Incorporating the construct of calling into career counselors' practices may help clients to identify a clearer job-search objective, which in turn may increase the efficacy of their job-search activities. The discernment

of a calling can be promoted (Vianello et al., 2020), for example, by fostering individuals' active reflection about their interests and abilities and discussing with clients the meaning they attribute to work.

Limitations and Future Directions

Because we used a cross-sectional design rather than conducting a longitudinal investigation, any causal interpretation of our findings is unwarranted. There are alternative models that can fit our data equally well but that cannot be tested without a longitudinal design. More research is needed to test possible longitudinal effects on the relationship between career calling and job-search behaviors and to investigate other possible moderators, such as social support (Dalla Rosa & Vianello, 2020; Dalla Rosa, Vianello, & Anselmi, 2019; Dalla Rosa, Vianello, Galliani, et al., 2019; Kanfer et al., 2001).

A second limitation is that we did not assess economic needs. Financial hardship might moderate the relation between perceiving a calling and P-E fit. Individuals with higher financial needs are more motivated to find a job quickly and may not have the possibility of waiting for the job that better aligns with their calling. Extreme levels of financial hardship might suppress the relation between perceiving a calling and job-search behaviors. Future research is needed to investigate whether this hypothesis is supported.

References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Barbaranelli, C., Caprara, G. V., & Steca, P. (2002). *BFA: Big Five Adjectives*. Giunti O.S.
- Barrick, M. R., & Mount, M. K. (1991). The Big-Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1–26. <https://doi.org/10.1111/j.1744-6570.1991.tb00688.x>
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 115–160). Academic Press.
- Blau, G. (1993). Further exploring the relationship between job search and voluntary individual turnover. *Personnel Psychology*, 46(2), 313–330. <https://doi.org/10.1111/j.1744-6570.1993.tb00876.x>
- Boswell, W. R., Zimmerman, R. D., & Swider, B. W. (2012). Employee job search: Toward an understanding of search context and search objectives. *Journal of Management*, 38(1), 129–163. <https://doi.org/10.1177/0149206311421829>
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Cable, D. M., & Judge, T. A. (1996). Person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294–311. <https://doi.org/10.1006/obhd.1996.0081>
- Chen, D. J., & Lim, V. K. (2012). Strength in adversity: The influence of psychological capital on job search. *Journal of Organizational Behavior*, 33(6), 811–839. <https://doi.org/10.1002/job.1814>
- Cheung, G. W., & Lau, R. S. (2017). Accuracy of parameter estimates and confidence intervals in moderated mediation models: A comparison of regression and latent moderated structural equations. *Organizational Research Methods*, 20(4), 746–769. <https://doi.org/10.1177/1094428115595869>
- Côté, S., Saks, A. M., & Ziikic, J. (2006). Trait affect and job search outcomes. *Journal of Vocational Behavior*, 68(2), 233–252. <https://doi.org/10.1016/j.jvb.2005.08.001>
- Dalla Rosa, A., Galliani, E. M., & Vianello, M. (2014). Theories and measures of occupational calling: A review and research agenda. *Educational and Reflective Practices*, 4(2), 99–121.

- Dalla Rosa, A., Galliani, E. M., & Vianello, M. (2017). An integrative model of career calling and meta-analyses of its nomological network. In V. Boffo, M. Fedeli, F. Lo Presti, C. Melacarne, & M. Vianello (Eds.), *Employability, learning and guidance: A research for new strategies in higher education* (pp. 10–25). Pearson.
- Dalla Rosa, A., & Vianello, M. (2020). Linking calling with workaholism: Examining obsessive and harmonious passion as mediators and moderators. *Journal of Career Assessment*, 28(4), 589–607. <https://doi.org/10.1177/1069072720909039>
- Dalla Rosa, A., Vianello, M., & Anselmi, P. (2019). Longitudinal predictors of the development of a calling: New evidence for the a posteriori hypothesis. *Journal of Vocational Behavior*, 114, 44–56. <https://doi.org/10.1016/j.jvb.2019.02.007>
- Dalla Rosa, A., Vianello, M., Galliani, E. M., Boffo, V., Fedeli, M., Presti, F. L., & Melacarne, C. (2019). Data from a three-wave complete longitudinal design survey on career calling and related constructs ($N = 6368$). *Data in Brief*, 25, Article 104310.
- Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (2012). Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling scale (BCS). *Journal of Career Assessment*, 20(3), 242–263. <https://doi.org/10.1177/1069072711434410>
- Dobrow, S. R., & Heller, D. (2015). Follow your heart or your head? A longitudinal study of the facilitating role of calling and ability in the pursuit of a challenging career. *Journal of Applied Psychology*, 100(3), 695–712. <https://doi.org/10.1037/a0038011>
- Dobrow, S. R., & Tosti-Kharas, J. (2012). Listen to your heart? Calling and receptivity to career advice. *Journal of Career Assessment*, 20(3), 264–280. <https://doi.org/10.1177/1069072711434412>
- Duffy, R. D., Allan, B. A., Autin, K. L., & Bott, E. M. (2013). Calling and life satisfaction: It's not about having it, it's about living it. *Journal of Counseling Psychology*, 60(1), 42–52. <https://doi.org/10.1037/a0030635>
- Duffy, R. D., Allan, B. A., & Bott, E. M. (2012). Calling and life satisfaction among undergraduate students: Investigating mediators and moderators. *Journal of Happiness Studies*, 13(3), 469–479. <https://doi.org/10.1007/s10902-011-9274-6>
- Duffy, R. D., Bott, E. M., Allan, B. A., & Autin, K. L. (2015). Calling among the unemployed: Examining prevalence and links to coping with job loss. *The Journal of Positive Psychology*, 10(4), 332–345. <https://doi.org/10.1080/17439760.2014.967798>
- Duffy, R. D., Bott, E. M., Allan, B. A., Torrey, C. L., & Dik, B. J. (2012). Perceiving a calling, living a calling, and job satisfaction: Testing a moderated, multiple mediator model. *Journal of Counseling Psychology*, 59(1), 50–59. <https://doi.org/10.1037/a0026129>
- Duffy, R. D., Dik, B. J., Douglass, R. P., England, J. W., & Velez, B. L. (2018). Work as a calling: A theoretical model. *Journal of Counseling Psychology*, 65(4), 423–439. <https://doi.org/10.1037/cou0000276>
- Duffy, R. D., Douglass, R. P., Autin, K. L., & Allan, B. A. (2014). Examining predictors and outcomes of a career calling among undergraduate students. *Journal of Vocational Behavior*, 85(3), 309–318. <https://doi.org/10.1016/j.jvb.2014.08.009>
- Duffy, R. D., Douglass, R. P., Autin, K. L., & Allan, B. A. (2016). Examining predictors of work volition among undergraduate students. *Journal of Career Assessment*, 24(3), 441–459. <https://doi.org/10.1177/1069072715599377>
- Duffy, R. D., Douglass, R. P., Gensmer, N. P., England, J. W., & Kim, H. J. (2019). An initial examination of the work as calling theory. *Journal of Counseling Psychology*, 66(3), 328–340. <https://doi.org/10.1037/cou0000318>
- Elangovan, A. R., Pinder, C. C., & McLean, M. (2010). Callings and organizational behavior. *Journal of Vocational Behavior*, 76(3), 428–440. <https://doi.org/10.1016/j.jvb.2009.10.009>
- Finney, J. W., Mitchell, R. E., Cronkite, R. C., & Moos, R. H. (1984). Methodological issues in estimating main and interactive effects: Examples from coping/social support and stress field. *Journal of Health and Social Behavior*, 25(1), 85–98. <https://doi.org/10.2307/2136706>
- Gazica, M. W., & Spector, P. E. (2015). A comparison of individuals with unanswered callings to those with no calling at all. *Journal of Vocational Behavior*, 91, 1–10. <https://doi.org/10.1016/j.jvb.2015.08.008>
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, 60(6), 895–910. <https://doi.org/10.1037/0022-3514.60.6.895>

- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied Psychology, 86*(5), 837–855. <https://doi.org/10.1037/0021-9010.86.5.837>
- Klein, A., & Moosbrugger, H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika, 65*(4), 457–474. <https://doi.org/10.1007/BF02296338>
- Little, T. D., Bovaird, J. A., & Widaman, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables. *Structural Equation Modeling, 13*(4), 497–519. https://doi.org/10.1207/s15328007sem1304_1
- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological Bulletin, 140*(4), 1009–1041. <https://doi.org/10.1037/a0035923>
- Locke, E. A., & Latham, G. (1990). *A theory of goal setting and task performance*. Prentice Hall.
- Maslowsky, J., Jager, J., & Hemken, D. (2015). Estimating and interpreting latent variable interactions: A tutorial for applying the latent moderated structural equations method. *International Journal of Behavioral Development, 39*(1), 87–96. <https://doi.org/10.1177/0165025414552301>
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology, 90*(1), 53–76. <https://doi.org/10.1037/0021-9010.90.1.53>
- Medlin, B., & Green, K. W., Jr. (2009). Enhancing performance through goal setting, engagement, and optimism. *Industrial Management & Data Systems, 109*(7), 943–956. <https://doi.org/10.1108/02635570910982292>
- Muthén, L. K., & Muthén, B. O. (2012). *Mplus user's guide* (7th ed.). https://www.statmodel.com/download/usersguide/Mplus%20user%20guide%20Ver_7_r3_web.pdf
- Praskova, A., Hood, M., & Creed, P. A. (2014). Testing a calling model of psychological career success in Australian young adults: A longitudinal study. *Journal of Vocational Behavior, 85*(1), 125–135. <https://doi.org/10.1016/j.jvb.2014.04.004>
- Saks, A. M., & Ashforth, B. E. (2002). Is job search related to employment quality? It all depends on the fit. *Journal of Applied Psychology, 87*(4), 646–654. <https://doi.org/10.1037/0021-9010.87.4.646>
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology, 67*(6), 1063–1078. <https://doi.org/10.1037/0022-3514.67.6.1063>
- Schmit, M. J., Amel, E. L., & Ryan, A. M. (1993). Self-reported assertive job-seeking behaviors of minimally educated job hunters. *Personnel Psychology, 46*(1), 105–124. <https://doi.org/10.1111/j.1744-6570.1993.tb00869.x>
- Torrey, C. L., & Duffy, R. D. (2012). Calling and well-being among adults: Differential relations by employment status. *Journal of Career Assessment, 20*(4), 415–425. <https://doi.org/10.1177/1069072712448894>
- Vianello, M., Dalla Rosa A., Anselmi P., & Galliani, E. M. (2018). Validity and measurement invariance of the Unified Multidimensional Calling Scale (UMCS): A three-wave survey study. *PLoS ONE, 13*(12), Article e0209348. <https://doi.org/10.1371/journal.pone.0209348>
- Vianello, M., Galliani, E. M., Dalla Rosa, A., & Anselmi, P. (2020). The developmental trajectories of calling: Predictors and outcomes. *Journal of Career Assessment, 28*(1), 128–146. <https://doi.org/10.1177/1069072719831276>
- Wanberg, C. R., Hough, L. M., & Song, Z. (2002). Predictive validity of a multidisciplinary model of reemployment success. *Journal of Applied Psychology, 87*(6), 1100–1120. <https://doi.org/10.1037/0021-9010.87.6.1100>