

# THE ROLE OF MENTORS ON THE DEVELOPMENT OF CALLING IN STUDENTS: A 3-YEAR INVESTIGATION

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**ABSTRACT:** In a three-wave longitudinal study, we investigated the role of mentoring on calling development. The results suggest that the mere presence of a mentor is associated with higher levels of calling and the development of a calling is fostered by the mentors' calling orientation, yet it is restrained by mentors' job and career orientation.

**KEYWORDS:** calling, longitudinal design, calling development, mentorship.

## 1. Introduction

A calling is a multi-dimensional construct that describes affective, motivational, spiritual, and identity-related facets of the relationship between individuals and specific domains in life or work. Viewing one's career as a calling is critical to the individual success and central in promoting positive work-related outcomes (Dobrow, Heller 2014; Dobrow, Tosti-Kharas 2011, 2012; Duffy, Allan, Autin, Douglass 2014; Duffy, Douglass, Autin, Allan 2014; Hirschi, Herrmann 2012, 2013; Praskova, Hood, Creed 2014). Theoretical and empirical contributions suggest that a calling changes over time (Dobrow 2013; Duffy, Manuel, Borger, Bott 2011; Vianello, Galliani, Dalla Rosa, Anselmi, Unpublished manuscript) and involves an «ongoing process» (Duffy, Dik 2013) in which individuals evaluate the purpose and meaningfulness of their job activities and the quality of the interaction with the context. Despite an emerging interest in calling, little is known about the origin of calling and whether the social environment influences its development. Previous research suggested that the social environment may influence individuals' attitude toward work and help people live out their calling (Cardador, Dane, Pratt 2011; Guo *et al.* 2014; Harzer, Ruch 2012). Trusted sources of information and experienced individuals may play an important role in the development of calling by providing a role and an attitude model (Ragins, Cotton, Miller 2000).

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## 2. Theoretical backgrounds

### 2.1 The role of the social environment in calling development

There are only three published studies that investigated the role of others in the development of a calling, and all these studies focused on the development of a calling for the music domain (Dobrow, Tosti-Kharas 2012; Dobrow 2006, 2013). Dobrow (2006) found that parents' involvement in the arts had a positive effect on students' initial calling for the music domain. Dobrow and Tosti-Kharas (2012) investigated the relationship between calling and students' receptivity to the advice, provided by a mentor, which discourages them from pursuing a professional path in their calling domain. They found that calling reduces the effect of the discouraging advice, so that students with a higher calling are more likely to ignore negative career-related advice provided by their private music teacher. This result was replicated in a cross-sectional study that involved a sample of business students.

In 2013, Dobrow investigated the role of social comfort in the development of a calling. Social comfort in the music domain measures the extent to which students enjoy spending time with other musicians, and it was found to have a positive effect on initial calling and a small negative effect on its development over time. Finally, Dalla Rosa, Vianello, and Anselmi (Unpublished manuscript), found that social support provided by friends, family and a special person helps students to develop their calling. Taken together, these results suggest that a calling is not only an intraindividual phenomenon. There is evidence of a connection between the intimate experience of having a calling and relationships with others and the social context (Dobrow, 2006, 2013; Dobrow, Tosti-Kharas 2012). Indeed, participants in qualitative studies commonly mentioned the supportive role of others as a factor that influences the emergence of a calling (Duffy *et al.* 2012; French, Domene 2010). The effect of social comfort and support on calling suggests that the enjoyment and pleasure in being around others, and the presence of people with whom students can discuss their problems and who are willing to comfort and encourage them fosters calling development. However, we do not know whether these positive effects on calling are due to the mere presence of people willing to support or whether these persons may also represent a role and attitude model.

The study conducted by Dobrow and Tosti-Kharas in 2012 was the first to focus on the role of a mentor and suggested that having a strong calling is associated with greater willingness to ignore negative career advice on time. However, this study did not investigate the specific effect of having a mentor in the development of a calling. Thus, the role of the social context in the development of calling is still unclear.

## 2.2 *The role of a mentor in career development*

Research on career attitude and commitment highlighted the importance of others, especially family, peers and mentors, on career development. Some scholars have suggested that a mentor may positively influence the work attitude of a protégé (Eby, Allen, Evans, Ng, DuBois 2008; Ragins *et al.* 2000), may help to find a meaning in work (Rosso, Dekas, Wrzesniewski 2010) and may support the development of workplace spirituality (Buzzanell 2009; Reave 2005; Weinberg, Locander 2014).

First, mentoring was found to influence the way people experience a work role. Research comparing people with and without a mentor showed that the presence of a reference and a trusted person leads to greater career and job satisfaction, career commitment and involvement, positive job attitude and motivation (Ragins *et al.* 2000; Payne, Huffmann 2005; Chao 1997; Eby *et al.* 2008).

Workplace spirituality can be defined as «the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community» (Ashmos, Duchon 2000: 137). Weinberg and Locander (2014) suggest that a mentor provides not only psychological and vocational support, but can also provide spiritual support, encouraging the development of protégé workplace spirituality. Specifically, a mentor helps finding meaning in work activities, encourages a protégé to associate work with what they think is important in life, and might promote «a sense of transcendence throughout the work process by appealing to his or her sense of calling» (Weinberg, Locander 2014: 395). A mentor with high levels of calling might help a person to find meaning in an activity, to understand the deeper aspects of work and, consequently, provide the opportunity to develop a sense of calling.

Having a calling gives meaning and purpose to a life role (Dik, Duffy 2009; Dobrow, Tosti-Kharas 2011; Praskova *et al.* 2014), and it is related to well-being and positive work outcomes (Dalla Rosa, Vianello, Galliani 2017). Therefore, positive work attitude, work meaningfulness and workplace spirituality are all constructs that are theoretically related to calling hence we expect to find evidence of a relationship between mentorship and calling. In addition, a mentor can be perceived as a role model. This implies that protégés could carry on imitating and assimilating values and attitudes of their mentor (Bell 1970; Kaufmann, Harrell, Milam, Woolverton, Miller 1986). This may also be true for protégés' perception of having a calling.

## 3. *Hypotheses*

This study investigated the role of a mentor on calling development focusing on two factors: (1) the effect of the mere presence of a mentor, and

(2) the effect of mentors' orientation toward work on their protégés' calling. First, we hypothesize that students with a mentor have a higher level of calling than students who do not have a mentor (HP1). In addition, we expect the level of calling of students with a mentor to increase over time, and to remain stable or to decrease over time for students without a mentor (HP2). Second, we expect that mentors' orientation toward work influence their protégés' calling over time, making them more similar (HP3). According to the values of openness and reproducibility (Open Science, <<https://osf.io/tvyxz/wiki/home/>>), these hypotheses and analysis plans have been already registered and are publicly available at <<https://osf.io/2wcky/>>.

#### 4. Materials and method

Data were collected in three waves using a non-experimental online survey. The second and third wave respectively occurred 12 and 24 months after the first data collection. A sample of 5886 bachelor's and master's students enrolled at four Italian universities was involved in the first data collection (T1), 1700 students took part in the second data collection (T2), and 881 took part in the third data collection (T3). The analyses presented in this study were performed on the sample of 434 students who participated at all the three waves.

##### 4.1 Participants

The sample was mainly composed of women (63.8%, 65.8%, and 68% females at T1, T2, and T3, respectively). Participants' ages ranged between 18 and 69 ( $M_{T1} = 23.37$ ;  $SD_{T1} = 5.39$ ;  $M_{T2} = 23.47$ ;  $SD_{T2} = 4.82$ ;  $M_{T3} = 24.02$ ;  $SD_{T3} = 4.50$ ). Among the students who took part to the three data collection 28% ( $n = 123$  out of 434) declared that they had a mentor at times 1, 2 and 3; 27% declared that they did not have a mentor at times 1, 2 and 3 ( $n = 118$  out of 434). In our sample, a mentor is often a professor at high school (10.7%; 8.7%; 7% respectively at T1, T2 and T3) or at College (8.6%; 9.9%; 9.6% respectively at T1, T2 and T3), a friend or a relative (16.5%; 9.8%; 15.1 respectively at T1, T2 and T3).

##### 4.2 Measures

*Calling.* We used the 22-item Unified Multidimensional Calling Scale (Vianello, Dalla Rosa, Anselmi, Unpublished manuscript), which measures seven facets of calling: passion, purposefulness, sacrifice, pervasiveness, prosocial orientation, transcendent summons, and identity. Identity was not assessed at Time 1. A detailed presentation of the measure is reported at <https://osf.io/zc8ha>.

*Student and mentor orientation toward work.* Students were provided with three paragraphs (Work-Life Questionnaire; Wrzesniewski *et al.* 1997) describing work as a job (e.g. people only interested in the material benefits of working), a career (e.g. people mainly interested in achievement and power), or a calling (e.g. people work for personal satisfaction and fulfillment), and asked which one best matched their orientation to work. We then asked them to indicate if they have a mentor (a person with experience, who is a wise guide, a reference model and a trusted advisor; Noe 1988; Ragins *et al.* 2000) and to describe the mentor's orientation toward work using the same scale.

### 4.3 Analytical Procedure

To test the effect of the mere presence of a mentor on calling (hypotheses 1 and 2), generalized linear models for repeated measures were adopted. The dependent variables were the facets of calling (within subject variables). The independent variables were the presence of a mentor at T1, T2 and T3 (between-subject variables with 2 levels: with and without a mentor). A full factorial design was estimated with the main effects of both the within (time) and between subjects (presence of a mentor) factors, and the interaction terms between presence of mentor and time. In addition, we performed t-tests and post-hoc analyses in order to test whether the dependent variables significantly increased over time within each group, and if the differences in the level of dependent variables were significant within time and groups.

To test the effects of mentors' orientation toward work on students' experience of having a calling (Hypothesis 3) we estimated and compared four alternative nested panel models (Little, Preacher, Selig, Card 2007; Selig, Little 2012). In each model, we specified alternative longitudinal relationships between mentor's orientation (job, career and calling) and students' calling (seven facets) and orientation toward work (job, career, calling). Model 1 was a baseline autoregressive model (no lagged effects) which estimated the effect of a construct on itself over time and the correlations between different constructs evaluated at the same time point. The second model added the cross-lagged paths from mentor orientation toward work at T1 and T2 to students' orientation toward work and calling respectively at T2 and T3. The third model added to Model 1 the cross-lagged path from students' calling and orientation toward work at T1 and T2 to mentor's orientation toward work respectively at T2 and T3. In this model, the opposite of Model 2, measures of student calling and calling orientation influences their mentor's orientation toward work. This alternative is possible, for example, if students chose a mentor according to their orientation toward work. Finally, the fourth model estimated all the cross-lagged structural patterns to test the hypothesis that students

and mentors influence each other over time. Models were estimated using MPlus 6.11 (Muthén, Muthén 1998–2012). To choose the best-fitting model between alternatives, we used the chi-square test of close fit, the difference in comparative fit index (CFI; Bentler, 1990), and the standardized root mean squared of residuals (SRMR). We interpreted a difference in CFI and SRMR greater than .01 as evidence that the least parsimonious model should be chosen (Chen 2007; Cheung, Rensvold 2002).

## 5. Results

### 5.1 Hypotheses 1 and 2: effects of the mere presence of a mentor

First, we tested the effect of the mere presence of a mentor on calling level and development. Figure 1 show interaction and main effects of the presence of a mentor on calling facets. We found a significant main effect of mentor at T1 on passion ( $F(1,419) = 8.20, \mu^2 = .02$ ), transcendent summons ( $F(1, 380) = 11.54, \mu^2 = .03$ ), sacrifice ( $F(1,415) = 4.64, \mu^2 = .01$ ) and pervasiveness ( $F(1, 420) = 7.88, \mu^2 = .02$ ). Thus, students with a mentor showed different levels of calling depending on the presence of a mentor at Time 1. Specifically, within each time, students with a mentor have higher levels of calling than students without a mentor. We then analyzed the difference in the level of calling between the group of students with a mentor and the group without a mentor. Results suggest that students with a mentor at Time 1, 2 and 3 have higher levels of passion, sacrifice, transcendent summons, prosocial orientation, purposefulness, identity and pervasiveness than students without a mentor during the entire data collection ( $t$  test ranged from  $t(239) = -2.99$  to  $t(231) = -4.87$ ).

Regarding the effects of the mere presence of a mentor on calling development, we found a significant two-way interaction between the presence of a mentor at T2 and time on Sacrifice,  $F(2,418) = 6.36, \mu^2 = .03$ , and Pervasiveness,  $F(2, 419) = 4.05, \mu^2 = .02$ . The significant interaction of time and presence of a mentor means that the groups' level of calling changes over time and in different ways depending on the presence of a mentor. Specifically, sacrifice and pervasiveness decrease significantly over time only for students with a mentor at T1 and T2 who lose it at T3 (paired  $t$ -tests for sacrifice:  $t_{T2-T3}(31) = 2.46, p = .02$ ; and pervasiveness:  $t_{T2-T3}(31) = 2.11, p = .04$ ). However, this result was observed on a small sample of 33 students.

We found two significant interaction effects on prosocial orientation, specifically between the presence of a mentor at T2 and 3 and Time,  $F(2,417) = 3.45, \mu^2 = .02$ , and between time and the presence of a mentor at T1 and 3,  $F(2,417) = 3.23, \mu^2 = .02$ . Specifically, prosocial orientation increases over time for the group of students with an unstable presence of a mentor over time ( $t_{T1-T2}(188) = -2.46, p = .01$ ;  $t_{T1-T3}(188) = -3.27, p < .001$ ).

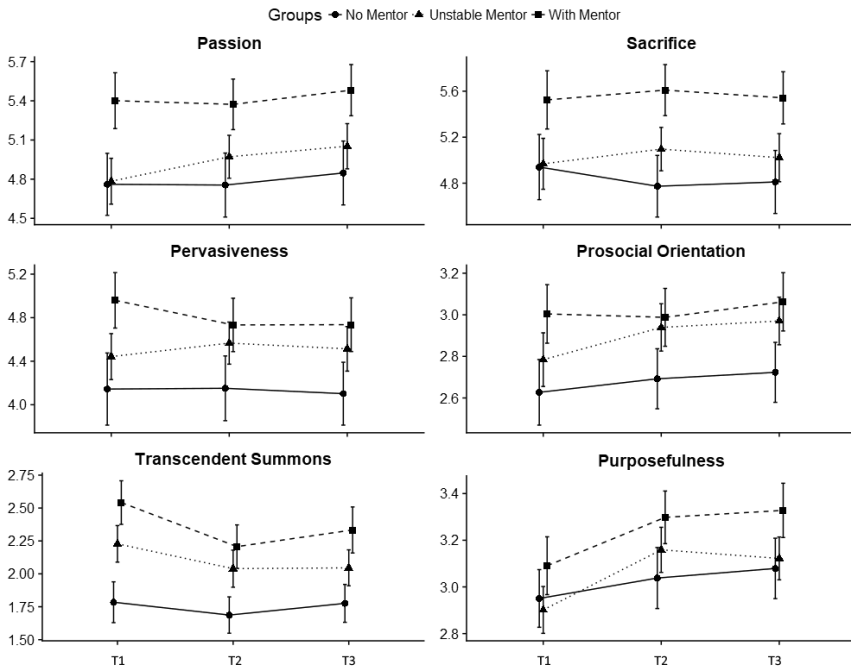
Finally, there is a significant interaction effect between time and the presence of a mentor at T1, 2 and 3 on passion,  $F(2,418) = 3.38, \mu^2 = .02$ . Passion increases over time for students who had an unstable presence of a mentor over time ( $t_{T1-T2}(187) = -2.44, p = .02; t_{T1-T3}(190) = -3.16, p = .002$ ).

We did not find significant interaction effects on transcendent summons, however we observed that it decreases significantly over time for students with a mentor ( $t_{T1-T2}(116) = 3.74, p < .001$ ) and with an unstable presence of a mentor ( $t_{T1-T2}(173) = 3.37, p < .001; t_{T1-T3}(173) = 2.87, p < .001$ ).

Finally, purposefulness increases for students with a mentor ( $t_{T1-T2}(122) = -4.05, p < .001; t_{T1-T3}(122) = -3.52, p = .001$ ), for students without a mentor ( $t_{T1-T3}(117) = -2.04, p = .04$ ), and for the group with an unstable presence of a mentor ( $t_{T1-T2}(189) = -5.00, p < .001; t_{T1-T3}(188) = -4.19, p < .001$ ).

These results provided a mixed picture of whether the presence of a mentor is associated with an increase or decrease in calling over time. Sacrifice and pervasiveness tend to decrease significantly when students lose their mentor. Both prosocial orientation and passion increase over time for students who have an unstable presence of a mentor over time.

Figure 1 – Interaction and main effects of the mere presence of a mentor on students’ calling.



Different lines represent groups of students with a mentor ( $n = 123$ ), without a mentor ( $n = 118$ ) and with a non-stable presence of a mentor across the data collections ( $n = 193$ ). Bars represent 95% confidence interval. Across time, students with a mentor showed higher levels of passion and sacrifice than students without a mentor. Pervasiveness was higher at Time 1 for students with a mentor compared to the other groups. Transcendent Summons was lower at Time 1 for students without a mentor compared to the other groups.

### 5.2 Hypothesis 3: The longitudinal effect of mentors' orientation on protégés' orientation and calling

To test the third hypothesis, we analyzed the effect of mentor's orientation toward work on student's orientation and calling. Table 1 shows model comparisons and fit indices for the four competing models. The models have a moderate fit to the data; CFI is around .90, with RMSEA lower than .06 and SRMR lower than .13. One possible reason for the non-excellent fit is that the paths between different dimensions of calling over time are not estimated. Since the focus of the analysis was the effect of mentors' orientation, it was decided to not modify the models and to focus on comparisons.

Table 1 – Results of Nested-Models comparisons.

	$\Delta$ CFI	$\Delta$ RMSEA	$\Delta$ SRMR	$\Delta\chi^2$	$\Delta$ df	$p$	Winner
Model 1 vs. 2	-.01	-.002	.024	102.38	60	<.001	Model 2
Model 1 vs. 3	-.006	-.003	.004	88.15	57	.005	Model 1
Model 1 vs. 4	-.014	-.005	.029	186.18	116	<.001	Model 4
Model 2 vs. 4	-.004	-.003	.005	83.803	56	.01	Model 2

*Note.* Model 1 - autoregressive:  $\chi^2(456) = 1064.80$ ; CFI = .896; RMSEA = .055; 95% CI [.051-.06]; SRMR = .13. Model 2 - Mentor influences protégé:  $\chi^2(396) = 962.41$ ; CFI = .906; RMSEA = .057; 95 CI [.053-.062]; SRMR = .106. Model 3 - Protégé influences Mentor:  $\chi^2(399) = 976.64$ ; CFI = .902; RMSEA = .058; 95% CI [.053-.062]; SRMR = .126. Model 4 - Reciprocal causation model:  $\chi^2(340) = 878.61$ ; CFI = .91; RMSEA = .06; 95% CI [.056-.065]; SRMR = .101.

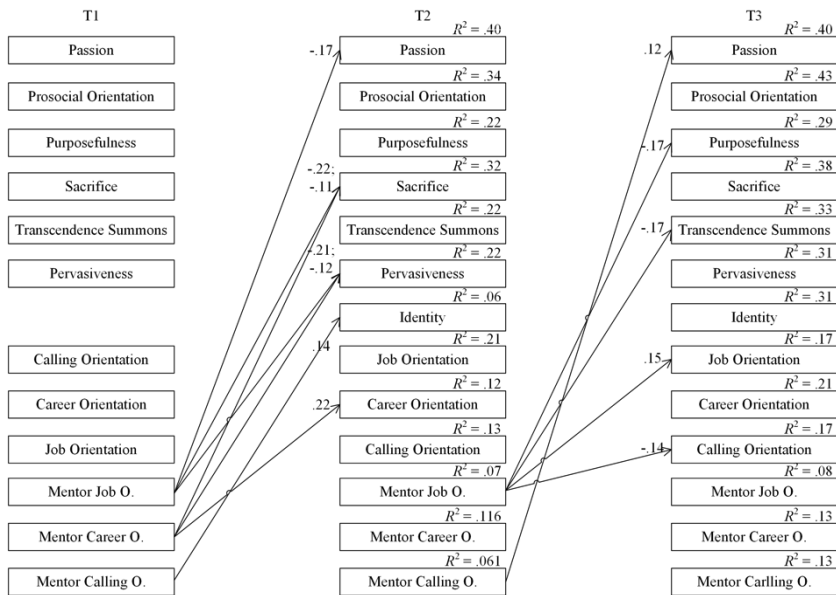
The chi-square difference tests between Models 1, 2, and 4 were significant, and the differences in CFI and/or SRMR were larger than .01. Model 2 and 4 fit the data better than Model 1. On the contrary, the differences in CFI and SRMR suggested that Model 3, which specifies student's calling as a predictor of mentor's orientation toward work, did not fit the data better than Model 1 and was then rejected.

Models 2 and Model 4 were then compared in order to identify which types of causal relationship, mentor to protégé or reciprocal, better de-



scribes our data. Model 4 (reciprocal causation) was favored over Model 2 by the test of close fit, but not by the differences in CFI and SRMR, which were lower than .01. Hence, we accepted Model 2 as the most parsimonious. This result suggests that mentors’ orientation toward work influence student’s calling and orientation. Figure 2 reports the non-null effects of mentor on students’ calling.

Figure 2 – Model 2: Statistically significant paths from mentors’ orientation toward work on students’ levels of calling and calling orientation. Covariances and autoregressive paths are not depicted for clarity. O. = Orientation toward work.



The effect of a mentor on calling is mainly due to the career and job orientation toward work. Mentor’s job orientation negatively influences students’ passion, sacrifice, and pervasiveness at T2, and negatively influences students’ transcendent summons, purposefulness, and calling orientation at T3. The mentor’s job orientation has a positive effect on students’ job orientation. Having a mentor who is interested in material benefits from work reduces student’s passion, willingness to sacrifice, pervasiveness, purposefulness and transcendent summons. In addition, having a mentor with a job orientation promotes the same attitude on students and discourage a calling orientation toward work.

Mentor’s career orientation at T1 has a negative effect on students sacrifice and pervasiveness, and promotes students career orientation at T2. Having a mentor interested in career and success, promotes in the protégé the same interest in career and success, while it reduces willingness to sacrifice and pervasiveness.

Mentor's calling orientation has a positive significant effect on students' identity at T2 and passion at T3. So, when mentors are passionate, when they live out their work as a vital part of their life, students tend to develop higher identification and passion in their calling domain.

## 6. Discussion

This study is, to our knowledge, the first investigation of the effect of mentoring on the development of calling. In agreement with hypothesis 1, we found that students with a mentor show a higher calling than students without a mentor within three time points. Second, the presence of a mentor was expected to increase the level of calling over time (Hypothesis 2). Our results did not provide a clear support for this hypothesis. The mere presence of a mentor is related to both an increment and decrement in calling: it is possible that individuals vary much on their calling development (Vianello, Galliani *et al.*, Unpublished manuscript) and that other variables intervene in explaining how the presence of a mentor influences changes in calling over time.

To test the third hypothesis we analyzed the effect that a mentor's orientation has on the students' sense of calling and orientation. A mentor was expected to shape the protégé's sense of work as a calling, a job, or a career, because there is evidence that a mentor influences their protégé's attitudes (Allen, Eby, Poteet, Lentz, Lima, 2004; Eby *et al.* 2008), and because people look to others for cues regarding how to think and behave (Social Learning Theory; Bandura 1971; Social Information Processing Theory; Salancik, Pfeffer 1978). The results support the presence of a longitudinal effect of a mentor on a student's calling and attitude toward work. The model with a mentor's job, career and calling orientation as predictors of students' calling (Model 2) better represented the data. Results suggest that having a mentor interested in career advancement or financial gain inhibits the development of a calling. Indeed, mentor job and career orientation emerged as strong negative predictors of protégé calling. If examples of people with a calling are not available, students might be less willing to find or look for their calling. On the other hand, the calling orientation of a mentor is associated to an increase in students' identification in and passion for the calling domain. Therefore, it seems that the role of a mentor can be more useful if it allows an individual's calling to be expressed in a particular job, profession, role or area of life, rather than orientating the calling to a particular job or role.

Even if these results are only tentative, they contribute to the literature on calling in many ways. Having a mentor is associated with higher initial calling and mentor's orientation influences a protégé's calling orientation and levels of calling facets toward work. Having a mentor

with a job or career orientation toward work may prevent the development of a calling. Thus, we do not know why students with a mentor have a higher level of calling than students without a mentor. One possible explanation is that students with higher levels of calling are more likely to look for a mentor. This theoretical account was not analyzed in this study, and represents one of the open questions that may be addressed in future research.

### *7. Limitations and future directions*

Further analyses are needed to clarify some results. First, we did not investigate thoroughly the development of calling for students who lost and/or found their mentor during the data collection (unstable presence of a mentor). Thus, further research is needed in order to extend our results. Second, we did not investigate whether variables such as gender, duration of and satisfaction with the mentoring relationship, the type of mentorship relation (formal or informal), and the quality of the mentoring (role modeling, vocational and psychological support), intervene in explaining the influence of a mentor on students' calling orientation. Literature on mentorship suggests that gender is a key factor in influencing people's choices, quality of relationship and the effectiveness of a mentorship (Ragins, Cotton 1991; Scandura, Williams 2001). Formal and informal mentoring relationships (Ragins *et al.* 2000; Kram 1985) have different origins and different developments; we might expect an informal mentor to be more effective in terms of influencing a student's attitude toward work than a formal mentor. In addition, how much a person considers the mentor as a role model or the level of psychological and vocational support provided by the mentor may explain the association between mentor's and protégé's calling and orientation toward work that we found. As applied to mentoring relationships, role modeling can be seen as a form of relational identification (Mitchell, Eby, Ragins 2015); role modeling involves the protégé identifying with the mentor and the protégé internalizing valued aspects of the mentor into his or her self concept (Kram 1985). Third, a critical point in these results is that mentor orientation toward work was assessed only by students. Thus, a study involving both mentors and protégés is needed.

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