The impact of a leader's demographic and professional characteristics on employee motivation: Do they really matter?

Abstract

Purpose
Building on arguments drawn from research on strategic leadership, this study seek to examine the possible effect on employee motivation of two sets of characteristics related to leaders: 1) demographic characteristics (gender and age); and 2) professional development characteristics (tenure, seniority, and training).

Design/methodology/approach
The empirical analysis is based on data from a survey of Spanish educational organizations. Hierarchical multiple regression analysis estimations are used for testing our hypotheses.

Findings
Results reveal that the characteristics linked to the leader's professional development have a significant impact on employee motivation. Specifically, a long-term tenure has a negative effect, while seniority in the organization and training have a positive impact on it. However, none of the leader's demographic characteristics considered in the study has a significant impact on employee motivation.

Practical implications
Several lines of managerial action are suggested for improving employee motivation.

Originality/value
This study is one of the first attempts to explore what impact certain leaders' characteristics have on employee motivation.

Keywords

Employees, gender, motivation, training.

Employee motivation has traditionally been a core concern for leaders (Amabile, 1993), as the success of the organizations they manage depends largely on their employees. In fact, it seems clear that one of the most relevant leadership competencies is the ability to motivate employees. As recently argued by Nohria, Groysberg, and Lee (2008: 78), getting the best out of employees ―or to put it another way, having highly motivated employees― has today become "one of managers' most enduring and slippery challenges". Based on two major studies of two global businesses and three hundred *Fortune 500* companies, they find evidence for a direct and positive relationship between employee motivation and their top managers' ability to motivate staff. In a similar vein, Adair (2006) suggests that about fifty per cent of employee motivation depends on leaders' behavior.

Prior research based on the Upper Echelons Theory recognizes that leaders' values, cognitions, perceptions, and behaviors may be conditioned by some of their observable demographic and personal characteristics (e.g., Hambrick and Mason, 1984; Hambrick, 2007). Although leaders may be key drivers of motivation, there is a lack of research exploring how their characteristics ―considered reasonable proxies for the underlying differences in their behaviors (e.g., Carpenter et al., 2004; Hambrick an Mason, 1984)― may effectively impact on employee motivation. Accordingly, this study aims to fill this gap in the literature by addressing the following research question: What impact do leaders' characteristics have on employee motivation? More specifically, this study seeks to examine the possible effect on employee motivation of two sets of characteristics related to leaders: 1) demographic characteristics (e.g., gender and age); and 2) professional development characteristics (e.g., tenure, seniority, and training).

We develop a set of hypotheses by describing how the leaders' characteristics considered in this study may either facilitate or hinder employee motivation. In this regard, we argue that the strategic leadership perspective, which is rooted in Upper Echelon Theory, may provide a

helpful theoretical perspective for addressing our research question, as it asserts that leaders are crucial to organizational outcomes "because of the decisions they are empowered to make and because, ultimately, they account for what happens to the organization" (Hambrick, 1989: 5; Vera and Crossan, 2004: 222).

This study contributes to the research on the determinants of employee motivation by providing fresh insights. Researchers have long been grappling with the conditions under which employees become internally and externally motivated to perform their tasks effectively (e.g., Camilleri, 2007; Hackman and Oldham, 1976; Manolopoulos, 2008; Word and Park, 2015). As we explain how several characteristics linked to strategic leaders may impact on employee motivation, we will attempt to further our understanding of motivation itself, mainly with regard to how it may be externally influenced. On the other hand, given that motivated employees boost organizational success, then the insights into human behavior derived from this study may help leaders to get the best out of their employees. This study might therefore help leaders to directly understand the way in which certain factors under their control may affect the employees they manage and, ultimately, organizational performance.

This study uses educational organizations as the research setting for empirically testing our hypotheses. This type of organization is a particularly suitable scenario because many studies have revealed that leaders (i.e., principals) are in a position to make a critical difference in their organizations' quality and outcomes (Day, Sammons, and Hopkins, 2009). In this regard, recent international reports on education (Barber and Mourshed, 2007; OECD, 2016) stress that a good or excellent educational organization tends to be managed by well-qualified leaders. In view of the impact education has on a society and its economic system, it is important to know how the characteristics and managerial skills associated with leaders are related to increased staff motivation. Our findings may therefore have significant implications

in the field of educational policy for informing the actions of managers in the process of more

effectively discharging their managerial functions and duties.

Theoretical development and hypotheses

Figure 1 provides a graphical presentation of our theoretical model. As depicted in this model,

we assume there is a potential relationship between certain demographic and professional

development characteristics related to leaders and employee motivation.

Insert Figure 1 about here

Gender

Some reports have recently argued over structural gender discrimination, stressing that after

several years of work women continue to account for a significantly lower share of leadership

positions, and are generally underrepresented in senior management positions (OECD, 2015).

For example, in 2016 women held 12 (2.4%) of CEO positions in Fortune Global 500 (this list

includes the world's 500 largest companies). In a similar vein, according to a CNN Money

analysis conducted in 2016, only 27 women (5.4%) were at the helm of S&P 500 companies.

Many studies have explored the glass ceiling that prevents career development among

women, as well as the reasons well-trained women with management aspirations fail to climb

the organizational ladder as easily as men (e.g., Chizema, Kamuriwo, and Shinozawa, 2015;

Festing, Knappert, and Kornau, 2015; Glass and Cook, 2016). Despite these barriers, an

extensive prior literature has been interested in examining the potential effect women leaders

may have on different performance indicators, such as productivity, growth, risk, or

profitability (e.g., Huang and Kisgen, 2013; Jalbert, Jalbert, and Furumo, 2013; Krishnan and

Park, 2005). Specifically, there are several studies showing that those organizations led by a

woman tend to achieve better outcomes than those managed by men (e.g., Gondhalekar and

Dalmia, 2007; Khan and Vieito, 2013). Overall, most of these studies emphasize the benefits that feminine values can bring to management positions, as well as the potentially positive effects of women's management style on organizational effectiveness (Bass and Avolio, 1994; Eagly, 2007). In this regard, it is commonly suggested that compared to their male counterparts, women managers are more likely to behave in a more democratic, cooperative, collaborative, emotional, and nurturing way (Eagly, Johannesen-Schmidt, and van Engen, 2003; Rosener, 1990).

Based on the values attributed to a feminine management style, we argue that women holding leadership positions may benefit the organization in terms of employee motivation. Their more interactive and intuitive cognitive style may engage other members and enhance subordinates' self-worth by making them feel an important part of the organization (Nielsen and Huse, 2010; Rosener, 1990). This value-centered and people-oriented style tends to emphasize harmony, agreement, commitment, and understanding. This style is also more likely to enable women to inspire confidence among their peers and subordinates, share information, and bring people together (Bass and Avolio, 1994; Krishnan and Park, 2005: 1713).

Dezsö and Ross (2012) reveal that women in leadership positions increase the motivation and commitment of fellow women lower down in the hierarchy, leading to an improvement both in their individual performance and in their contribution to the groups they belong to. This may be especially relevant in the case of educational organizations because they are considered feminized environments, and education requires many of the values and approaches associated with women (e.g., Eagly, Karau, and Johnson, 1992). In this sense, Krüger (2008) reports that women are more focused on education and school goals, they are better at creating a positive culture and an orderly learning atmosphere, they reward teachers more often, and they create more professional development opportunities for teachers. On the

other hand, their male counterparts tend to spend more time and attention on administrative tasks and external contacts. Similarly, Krüger et al. (2005) also reveal that women use a management style that is more heavily focused on human relations. In a similar vein, Eagly et al. (2003) argue that women produce significantly better outcomes than men in terms of the extra effort they inspire from subordinates and how people value their leadership. Therefore:

Hypothesis 1: *An organization led by a woman will have a positive influence on employee motivation.*

Age

An individual's age involves sundry biological and psychological changes that modify their emotional functioning, emotional experiences, and mental and cognitive capacity (Settersten and Mayer, 1997; Sterns and Doverspike, 1989; Sterns and Miklos, 1995). Several studies recognize that as age increases such changes have an impact on people's behavior and attitudes, as well as on their motivation toward work (e.g., Cleveland and McFarlane Shore, 1992; Kooij et al., 2011).

In terms of changes in behavior and attitudes, most of the literature stresses that older individuals are less innovative and more resistant to change, more skeptical, and generally less willing to participate in training and career development (e.g., De Lange et al., 2010; Ng and Feldman, 2012). By contrast, younger individuals generally have better attitudes toward individual and group work, showing more initiative and enthusiasm, and being more proactive. Regarding motivation toward work, several studies reveal that age modifies concerns about workload and effort (e.g., Mor-Barak, 1995; Park, 2000). Specifically, some of these studies suggest that older individuals become more selective in their work and non-labor activities by prioritizing non-work activities due to their more limited future time perspective (Zacher and Frese, 2009). In fact, the costs of cognitive activity increase with age in

adulthood, and these costs influence individuals' willingness to engage resources in support of demanding cognitive activities (Ennis, Hess, and Smith, 2013). On the other hand, younger individuals have a great desire to learn, evolving and facing different challenges when perceiving more opportunities for change within a longer time horizon. They are therefore more receptive to continuous improvement, and devote more personal resources to maximizing future results and improving their work performance (Kunze, Raes, and Bruch, 2015; Park, 2000). In this sense, Kooij et al. (2011) explore the relationship between age and work-related motives, finding a significant positive relationship between age and intrinsic motives, and a significant negative relationship between age and strength of growth and extrinsic motives.

Although the prior literature recognizes the effect age may have on an individual's personal behavior and motivations, as noted above, there are no studies that explore the effect of leaders' age on their subordinates' attitudes and motivation. Based on previous arguments, it seems more likely that because of their more passive and less participative attitudes (Zacher, Rosing, and Frese, 2011; Ng and Feldman, 2012), older leaders might be negatively perceived by their followers. The lower level of engagement, concern for work, initiative, or teamwork may have a negative effect on employee creativity and organizational effectiveness (Rego et al., 2007). It is therefore to be expected that younger leaders, by showing a greater commitment to improving the organization and a greater openness and willingness toward employee participation (Zacher et al., 2011), will contribute to increasing employee motivation. Therefore:

Hypothesis 2: *An organization led by a younger leader will have a positive influence on employee motivation.*

Tenure

Many studies suggest that leaders change their behavior over time as they mature and gain experience (e.g., Hambrick and Fukutomi, 1991; McCall, Lombardo, and Morrison, 1988; Westphal and Fredrickson, 2001). In general, several empirical studies consider a leader's prior experience in that position as a motivating factor for building trust, reliability, and mutual respect with subordinates (e.g., Avery et al., 2003; Bass and Avolio, 1994). However, there is an extensive part of the literature that ratifies the existence of several phases or seasons within a leader's tenure, each one characterized by different patterns of executive attention, behavior, and organizational performance (e.g., Avery et al., 2003; Hambrick and Fukutomi, 1991). Consequently, employee motivation may also be conditioned by the phase of the leader's tenure.

Hambrick and Fukutomi (1991: 719) recognize the need to dynamically model executive tenures, possibly in terms of their phases and seasons. They distinguish five discernible stages in a leader's tenure, and suggest that changes generally occur in several key dimensions (commitment to a paradigm, task knowledge, information diversity, task interest, and power). In the first phase —*response to mandate*—, the leader generally has a high level of commitment, and devotes more attention and energies. Although the leader has a relatively low task knowledge, they quickly overcome this disadvantage, acquiring a great deal of critical knowledge early on in the tenure (Greiner and Bhambri, 1989). In this phase, they have a high interest in the task, being perceived as interesting and very challenging. The second phase —*experimentation*— is characterized by a relative open-mindedness and intense learning, with high task interest and more power. In this sense, Gabarro (1987) also recognizes that new leaders undertake a wave of actions and undergo a "reshaping" stage in the first years. In the next phase —*selection of an enduring theme*—, the leader increases their commitment to a paradigm, as well as their belief in the enduring correctness of that approach

(Miller and Friesen, 1984). They have a high task knowledge, although in line with Gabarro (1987) and Katz (1980) after about two and a half years in their job they tend to engage in more routine and slower learning than they did in their earlier period. At this moment, the leader also reduces their task interest and restricts their information sources. During the fourth phase —*convergence*—, the leader is exposed to an even narrower and more filtered information flow; task interest starts to wane, and power increases. Finally, in the last phase —*dysfunction*—, the positive effects of a leader's continuing tenure are outweighed by the negative effects, because the leader usually shows less commitment and more fatigue, little openness and responsiveness to stimuli, and slow decision-making. In line with these arguments, several studies confirm that leaders have a more passive and less change-oriented leadership style at that moment (e.g., Ng and Feldman, 2012; Zacher et al., 2011). These causes could reduce the leader's power and employee motivation.

There are researchers sustaining that leaders experience their peak performance during the early stages (e.g., Day and Bakioglu, 1996; Hambrick and Fukutomi, 1991). In a similar vein, others conclude that manager rotation has a positive effect on certain employees' psychosocial factors and improves organizational performance (e.g., Eriksson and Ortega, 2006). This may be especially relevant when a new leader introduces an innovative approach to content and roles, and seeks to create new strategies or processes (Van Maanen and Schein, 1979). Accordingly, it seems logical to assume that employee motivation may increase when a leader is in the tenure's early stages, because they are more likely to show greater enthusiasm and expectations for change, and behave in a more active and participatory manner. Information diversity, more open communication processes, and a more engaging approach may give more importance to subordinates and increase work quality and motivation. Therefore:

Hypothesis 3: *An organization led by a leader with more tenure will have a negative influence on employee motivation.*

Seniority

Many studies have frequently used seniority as a proxy for organizational experience. It is true that seniority may be considered an indicator of experience within the organization, but a differentiation should be made between individual seniority in a specific position (tenure) or individual seniority in the organization. In fact, there are individuals with little experience in the same position or hierarchical level (e.g., as leader), but have been in an organization for a long time. It suggests that an individual has previously occupied lower hierarchical positions and has been promoted through one or several positions until becoming a leader.

On the one hand, the prior literature has widely recognized that greater seniority in the organization provides greater knowledge and understanding of environmental characteristics and organizational needs, as well as greater security and autonomy (e.g., Brimeyer, Perrucci, and Wadsworth, 2010; Hall and Mansfield, 1975). On the other hand, the literature also argues that seniority is the accumulation of personal investments in time and resources (e.g., Allen and Meyer, 1984; Cohen, 1993). Undoubtedly, seniority in the organization could potentially generate changes in individual attitudes toward work and behavior regarding other members of staff. In this sense, several studies report a positive relationship between seniority in the organization and organizational commitment and affective attachment to it (e.g., Hall and Mansfield, 1975; Hrebiniak and Alutto, 1972; Natarajan and Nagar, 2011; Allen and Meyer, 1993). Additionally, Kaur and Sandhu (2010) also recognize that the highest and most prestigious positions are usually associated with higher levels of organizational commitment.

Based on these previous arguments, a leader with more seniority in the organization may favor the degree of respect with regard to the rest of the organization's members and create a

favorable organizational climate (Kaur and Shandhu, 2010). In this context, it seems more likely that leaders with a higher level of investment and familiarization with the organization will have a positive impact on employee confidence and motivation. Finally, a leader with more seniority in the organization may also have previously occupied other positions lower down in the hierarchy, which may also promote a better understanding of the requirements and needs of those positions, and thus create greater empathy with subordinates. Ultimately, this circumstance may contribute positively to employee motivation. Therefore:

Hypothesis 4: *An organization led by a leader with more seniority will have a positive influence on employee motivation.*

Training

One of the more widely used arguments for the existence of continuous training programs is that they empower individuals to acquire the skills and abilities required to perform their tasks in a satisfactory manner. There are studies confirming that training has a positive impact on the perception of self-efficacy, as well as on productivity and job performance (e.g., Bartel, 1994; Knoke and Kalleberg, 1994; Phillips, 2012; Salas et al., 2012). These researchers also argue that such training also allows developing a larger repertoire of responses to tackle potential problems calmly and confidently, and thus respond more effectively to unexpected contingencies. In addition, other studies also reveal the benefits of training not just at an individual level, emphasizing the importance of the exchange and transfer of skills among individuals to improve teamwork and organizational climate (e.g., Burke and Hutchins, 2007; Delaney and Huselid, 1996; Rouiller and Goldstein, 1993).

Faced with an increasingly competitive scenario, organizational leaders are among the most important agents that can help generate and maintain organizational competitiveness and effectiveness (Hambrick, 2007). Several studies have highlighted the need to pay special attention to the continuous development of leaders through the proper management and

design of their training programs (e.g., Black and Gregersen, 2000, Clarke, 2012). In this vein, Greenfield (1977) finds that leaders receiving training prior and during their term of office greatly enhance their performance. However, as stated above, not only does training itself help to improve leaders' abilities and skills, as their training level, training motivation, and outcome expectancy can also be transferred to their employees and positively influence group performance (e.g., Scaduto, Lindsay, and Chiaburu, 2008; Velada et al., 2007; Tai, 2006). In fact, several studies recognize that management training programs tend to be associated with a significant improvement in organizational performance (e.g., Patton, Marlow, and Hannon, 2000; Storey, 2004).

It seems therefore reasonable to contend that a leader with the sound and continuous training required, and who manages to convey and reflect this to all the other agents, will help increase everyone else's perception as regards their competency and commitment level, while also raising the staff's level of trust, reliability, security, and motivation. In this sense, Knight et al. (1999) postulate that subordinates consider that a leadership profile corresponds to people with a greater knowledge of management tasks, and who undertake more training activities for the performance of their duties. Accordingly, it seems reasonable to expect that staff motivation will be positively affected if an organization's leaders undertake specific training programs to perform their job more effectively. Hence:

Hypothesis 5: *An organization whose leaders undertake continuous training programs will have a positive influence on employee motivation.*

Method

Data collection and sample

The empirical analysis for testing our hypotheses is based on data from a survey of Spanish educational organizations, and more specifically, secondary schools, in the Community of

Madrid. We drafted many of the questions in the survey following the guidelines of the OECD Teaching and Learning International Survey (TALIS) —Principal Questionnaire. We also used archival data included on each organization's websites, and the website of the Department of Education of the Community of Madrid.

The first step in the sampling frame involved the identifying the total population of secondary schools in the Community of Madrid. To this end, we retrieved the information available on the website of the Department of Education of the Community of Madrid. According to this information, the target population consisted of 595 schools. The second step included the preparation of a questionnaire that was emailed to the principal at each school. This questionnaire was previously reviewed by several academics and discussed with them. Additionally, we carried out face-to-face interviews with two principals and several teachers from two schools in order to receive feedback on the clarity of the questions included in the questionnaire, thereby ensuring that unfamiliar and ambiguous terms or issues were not included in any of the questions, and that the questionnaire was as concise as possible. This process improved its content, design, wording, and clarity, thus making potential completion of the questionnaire easier and more attractive.

A customized survey was considered the most appropriate way to collect data because, to our knowledge, comprehensive and detailed archival information on the issues examined was not available from secondary sources. Data were collected between May and September 2015. After three follow-up reminders, a total of 105 usable questionnaires were returned via email, which represents about 17.60% of the target population. This is a response rate that is comparable to most previous studies using this type of primary source.

We performed a χ^2 test to check whether there were significant differences between the study sample and the reference population. The variable 'district' is used for testing this, since educational organizations are grouped by districts or geographic areas. The χ^2 value was 6.653

(*p=0.155*). This means there were no statistically significant differences between the percentages of organizations included in the sample and the whole population. This could be interpreted as a clear indication of sample representativeness and the absence of selection bias in our empirical study. Similar results are found when other variables are used (e.g., organization ownership or size).

Measures

Our dependent variable is *Teacher Motivation*. To construct this variable, we studied the different validated measures of teacher motivation and teacher classification according to their motivation (e.g., Fernet et al., 2008; Tang, Wong, and Cheng, 2015; Watt and Richardson, 2008). Taking as a reference Watt and Richardson's (2008) classification —*highly engaged persisters, highly engaged switchers and lower engaged desisters*—, the principals were asked to indicate the percentage of teachers of each group in their respective organizations. In this way, *Teacher Motivation* is defined as the ratio of staff that showed motivation, a positive attitude, and a commitment to their organization (i.e., *highly engaged persisters* plus *highly engaged switchers*) over total staff. This is an appropriate way to measure employee motivation because the school principal is in daily personal contact with their staff, and can thereby see which teachers effectively show a greater level of motivation and engagement at work[1].

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[1] Response bias is a common problem in most research surveys. One of the most common sources of bias affecting the validity of survey research findings is the so-called social desirability bias. This is a bias that prompts subjects to answer in a way that makes them look more favorable to the researcher, and stems from, for example, survey modes such as face-to-face interviews or the assisted type of survey questionnaire administration and mailing (Furnham, 1986; Nederhof, 1985). This bias implies that subjects may over-report good behavior, while others may under-report bad or even undesirable behavior. Several options or strategies have typically been suggested to limit the potential effect of this bias. According to Nederhof (1985), one of these options involves the proper selection of the so-called 'Proxy subjects'. This option is based on the following assumption: instead of asking a person directly (in our case, teachers), it would be preferable to question someone (in our case, principals) who is close to or knows the target individual quite well. We have followed this assumption here.

The main independent variables of interest are as follows: Hypothesis 1 is tested using *Principal's gender*, a dichotomous variable taking a value 0 if the principal is a man and 1 if the principal is a woman. To operationalize Hypothesis 2, use is made of *Principal's age*, a variable that takes five possible values (1 for under 30, 2 for between 31 and 40, 3 for between 41 and 50, 4 for between 51 and 60, and 5 for over 60). Hypothesis 3 is tested using *Principal's tenure*, a variable taking five possible values (1 for a single term—less than four years, 2 for two terms —between four and eight years—, 3 for three terms —between nine and 12 years—, 4 for four terms —between 13 and 16 years—, and 5 for five or more terms. We use *Principal's seniority* to test Hypothesis 4, which is also a variable that takes five possible values (1 for less than five years, 2 for between five and ten years, 3 for between 11 and 15 years, 4 for between 16 and 20 years, and 5 for more than 20 years). Finally, Hypothesis 5 is tested using *Principal's training*, a dichotomous variable taking a value 1 if the principal has undertaken continuous training programs related to the position according to certain official training programs (courses organized by educational authorities, universities, trade unions and professional bodies), and 0 if not. The variables used to test Hypotheses 1-2 are representative of principals' demographic characteristics, while the variables testing Hypotheses 3-5 are representative of principals' professional development. Most of these independent variables have previously been used by a large body of empirical research in education (e.g., DeMoulin, 1992; Lee, Smith, and Cioci, 1993).

We also allow for a number of control variables, largely reflecting the potential influence on teacher motivation of other contextual, organizational, and personal variables, as suggested by prior research exploring educational organizations (e.g., Eyal and Roth, 2011; Klassen and Chiu, 2010; Tschannen-Moran and Hoy, 2007). These control variables are also added to minimize the risk of omitted variable bias. We control for the potential effect of *Organization Ownership* by considering a variable that takes a value of 1, 2 or 3 if the organization is

public, state-assisted, or private, respectively. *Leadership Style* is a dummy variable taking the value 1 if the leadership style followed by the principal is participative-supportive, and 0 if the leadership style is instrumental. *Teacher workload* indicates the average number of groups taught by each teacher, and takes four values (1 = fewer than four groups; 2 = four groups; 3 = five groups; and 4 = six or more groups). *Teacher Specialization* measures the proportion of teachers that work (teach) exclusively on subjects within their specialty. Finally, *Teacher Recognition* captures the management team's satisfaction with teachers' performance on a scale from 1 (not at all satisfied) to 4 (totally satisfied).

Results

Table 1 reports the descriptive statistics (means and standard deviations) and the correlations of all the variables used in our study sample. This table shows that the average number of motivated staff according to the principal is about 76%; in about 40% of cases the position of principal is held by a woman; the principal's age is over 51; the average number of tenures is two terms (between four and eight years); and the principal's seniority is about 15 years. Finally, it is also interesting to note that about 72% of principals have undertaken continuous training programs.

Insert Table 1 about here

The third column in Table 1 also shows that multicollinearity does not appear to be a problem in our study, as most of the explanatory variables (i.e., independent and control variables) have variance inflation factors (VIFs) that are well below the rule of thumb of five or ten advocated, respectively, by Marquardt and Snee (1975) and Kutner, Nachtsheim, and Neter (2004); most variables have VIFs lower than 1.450.

Table 2 presents the results of the hierarchical multiple regression analysis estimations for testing our hypotheses. We estimated seven different models. Model 1 is the basic model, as it includes only control variables. Models 2 and 3 contain the independent variables related to each principal's demographic characteristics; gender and age, respectively. On the other hand, Models 4, 5 and 6 separately add the potential effect of the variables related to the principal's professional development; tenure, seniority, and training, respectively. Finally, Model 7 includes all the control and independent variables considered. By performing all these stepwise regressions, we also examine the sensitivity of the significance of the main independent variables of interest.

Insert Table 2 about here

With respect to the impact the principal's demographic characteristics have on personnel motivation, Models 2 and 7 show a positive, but not statistically significant, effect of *Principal's gender* on *Teacher motivation*. Contrary to our expectations stated in Hypothesis 1, this means that gender does not have a significant influence on personnel motivation. Models 3 and 7 show a negative, but not significant, effect of *Principal's age* on *Teacher motivation*. We do not therefore find any support for Hypothesis 2, as age does not have a significant impact on personnel motivation either.

Regarding the potential effect of the principal's professional development characteristics, we find a negative and significant effect (although weak; *p<0.10*) of *Principal's tenure* on *Teacher motivation* (see Models 4 and 7). This suggests that those educational leaders with less tenure in office may exert a more positive effect on staff motivation compared to leaders with more tenure. Therefore, these findings provide some support for the arguments contained in Hypothesis 3. Model 5 shows that the effect of *Principal's seniority* on *Teacher motivation* is positive, but not significant. However, in Model 7 this effect is significant (*p<0.05*). These

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findings suggest that greater seniority in the organization may have a positive influence on staff motivation. In light of these results, it may be concluded that we find support for Hypothesis 4. Likewise, while the effect of *Principal's training* on *Teacher motivation* is positive, but not significant, in Model 6, this effect is significant ($p<0.05$) in Model 7. This indicates that staff motivation can be positively affected when an organization's leaders undertake training programs to enhance their job performance. Consequently, this finding provides support for Hypothesis 5.

Interestingly, our results also indicate that besides principals' demographic and professional development characteristics, there are other potential determinants of teacher motivation. For example, two of the control variables considered, *Teacher specialization* and *Teacher recognition,* are statistically and positively related to teacher motivation in most models (see Table 2). By contrast, one of the control variables representative of workload, *Teacher workload*, is negatively and significantly related to teacher motivation. It is also important to note that most of the control variables considered in the study maintain their signs and/or significance levels in the majority of models considered (see Models 1-7 in Table 2).

Discussion of results

The analysis of external aspects with a significant impact on staff motivation is especially interesting due to the potential effect this may have on individuals' behavior and, ultimately, on organizational performance. The interest in studying such aspects in the field of educational organizations is increasing at a time when professionals and academics are discussing the professional conditions that have undermined teachers' job motivation (e.g., Friedman, 2000; Hakanen, Bakker, and Schaufeli, 2006; Rudow, 1999). According to the report *Education at a Glance 2016: OECD Indicators,* teachers are the most valuable asset in

education, and their work in the classroom is the internal factor with the highest incidence on students' academic results. We therefore deem it crucial to discover whether several characteristics attributed to the organizational leader can help to improve teachers' motivation. The results of our empirical analysis have confirmed the influence of certain leadership characteristics on employee motivation.

On the one hand, leaders have certain demographic characteristics —such as gender and age— that do not have a significant impact on employee motivation. Despite focusing on the qualities and benefits of a female management style, there is no evidence to support the view that a woman may contribute more to employee motivation than a man. Likewise, a leader's age does not have a significant impact on employee motivation either. Although age modifies leaders' behavior and attitudes, a possible explanation for this non-significant finding is that individuals may differ in their functional or psychosocial age rather than in their chronological age (Stern and Doverspike, 1989). To some extent, our findings might be suggesting that regardless of a leader's gender or age, other personality and character traits —such as charisma, optimism or empathy— may shape their behavior, and thus have different consequences on employee motivation.

On the other hand, this study reveals that certain professional development characteristics in leaders may have a significant impact on teacher motivation. A leader's tenure results in an accumulation of experiences and knowledge. However, in line with other researchers that reveal the existence of different phases in a CEO's tenure, and underscore the benefits of the early stages regarding their level of commitment and interest in tasks (e.g., Hambrick and Fukutomi, 1991), we find a negative relationship between a principal's tenure and teacher motivation. Assuming that leaders do not engage in the same sequences of activities and emphasis during their tenures (Hambrick and Fukutomi, 1991), the relationship found may be due to the loss of employee motivation when long-term leaders record a decrease in

performance, a lack of openness, and slow decision-making. In this sense, our findings suggest that employee motivation may improve when they are led by leaders with less experience but a more positive attitude towards changes and challenges.

Regarding a principal's seniority, we find a positive effect on teacher motivation, and argue in favor of the advantages of longer service in the organization. The fact a principal is more familiar with and has a better understanding of the history, particularities and culture of the organization, as well as its members, may have a positive impact on employee respect and motivation. Consistent with our arguments, greater seniority in the organization suggests that a leader has also held a teaching position for longer, and therefore has a first-hand understanding of the actions and behaviors that may motivate current teachers.

In turn, principals have varying personal resources for performing their jobs. They will consider certain elements of their repertoires to be proven and reliable; other elements will be thought of as available, yet not very familiar, and still other elements will be considered as weak aspects that should be avoided (Hambrick and Fukutomi, 1991: 721). Hence the importance for leaders of specific and continuous training for developing their jobs. This training can certainly contribute to the development of skills and to a wider range of problem-solving responses. Along these lines, our findings suggest that continuous training is crucial for improving the performance of the principals themselves, their team, and the rest of staff, facilitating a change in behavior across the board. In fact, positive leader training may have a positive impact on employee motivation.

Finally, it should not be forgotten that employee motivation can also be influenced by other contextual, organizational, and personal factors. This study positively correlates teacher motivation with a job content closely related to their specialty subjects. Teacher recognition by the principal (e.g., verbal compliments, and support for personal autonomy and initiatives) has a very positive effect on teacher motivation (in this case, extrinsic motivation). However,

an excessive workload seems to have a negative impact on teacher motivation, and may

trigger burnout syndrome (e.g., Hakanen et al., 2006; Harden, 1999).

Conclusions

Employee motivation is a key factor behind an organization's success, as it favors one type or

other of attitude toward it. Motivation depends, on the one hand, on a series of internal or

intrinsic features that are linked to a sense of individual and collective self-sufficiency, a level

of competency, vocation, and challenge that an organization cannot control, and on the other

hand, on a series of external or extrinsic features such as work conditions and content,

incentives, and acknowledgement. This study is one of the first attempts to explore the

relationship between certain external characteristics linked to leaders and employee

motivation. Insofar as the latter are concerned, this study confirms the importance that certain

professional development characteristics – tenure, seniority, and training- may exert on a

leader's behaviors and methods, and therefore on employees' extrinsic motivation. By

contrast, there is no relationship between a leader's demographic characteristics –gender and

age– and employee motivation. In this sense, we also argue than there is no perfect leader

profile in educational organizations (or any other type of organization for that matter) in terms

of the demographic characteristics considered in this study.

Specifically, our results reveal that teachers' motivation may improve when they are led

by a principal with less time in office, because leaders in their early years tend to show greater

engagement, openness to change, and readiness for improvement. The fact the principal has

more seniority in the organization can also help to improve teacher motivation, as they are

more familiar with the organization's peculiarities. A principal's training will also allow them

to refresh their knowledge and develop new skills for improving the organization as a whole,

which may help to increase employee motivation. This means that in the case of professional

development characteristics, it would be possible to identify a leader profile: shorter time in office, but more seniority and training.

On the other hand, our study also confirms there are other characteristics related to work conditions and content and recognition practices that may have a positive impact on teachers' extrinsic motivation. The results show that teacher motivation improves when the work content is closely related to their specialty and when they obtain greater recognition from their principal. By contrast, an excessive workload has negative repercussions on teacher motivation, and probably on performance.

Practical implications

Our findings may help identify certain lines of action for improving teacher motivation, and therefore organizational performance. Regarding the role that educational authorities can play in this improvement process, our recommendation involves reflecting upon several key aspects related to principals' selection policies and the professionalization of the figure of principal. Regarding selection policies, there is a need to choose candidates by striking a balance between the variables examined here in order to mitigate the problems that in one way or another they pose. In addition, although a principal's gender has not explained teacher motivation here, we continue to value the benefits that women bring to education. It is therefore expedient to facilitate their access to leadership positions and help remove the glass ceiling in this type of organization. In relation to selection policies and access systems, the figure of principal should receive a greater level of professionalization and autonomy for responding to each organization's peculiarities. In this sense, a rigid structure and restricted autonomy are criticized, especially in public organizations. Although ownership does not have a significant impact on teacher motivation in this study, several studies do report that there may be significant differences in management practices and performance between public,

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state-assisted, and private organizations (e.g., Coulson, 2009); this may be due to their different autonomy level in managing human resources, among others.

As for the role of principal, special emphasis should be placed on training programs that allow them to adapt to new and changing educational requirements. In this way, a leader must become an example for their subordinates, using their own training to improve the organization's performance. This training may also be useful for implementing different employee motivation practices, as the positive effect of teachers' recognition on their extrinsic motivation has been confirmed. Such motivational practices should be designed to encourage and enhance teacher training, promotion, and performance.

Limitations

We end by setting out our study's main limitations and future avenues of research. First, the questionnaires have provided us with relatively easy access to the population subject to this analysis, but they have not allowed us to explore each organization's individual circumstances to observe in detail the work, performance, and decisions of the management teams and the rest of the staff. The limitations regarding the possible subjective nature of part of the information contained in the questionnaires, and therefore applicable to the construction of certain variables, would likewise be applicable here. While most measures of variables used in our study can be considered suitable (as they have also been used by other researchers), additional insights into association may be gained by adopting measures of several variables of interest (e.g., personnel motivation) that reflect different perspectives. In this sense, for example, it would be interesting to carry out an additional study by directly asking employees (in our case, teachers) —and not only the head of the organization— about their motivation. On the other hand, although the cross-sectional nature of the study precludes claims of causality, additional research adopting a longitudinal design would provide interesting insight

into the direction of the relationships between the main variables of interest. Finally, the results obtained should be framed within the specific nature of the organizations and context analyzed. This means it would be expedient to conduct a similar study on another kind of organization and/or countries to verify the extent to which the findings are consistent with the ones reported here.

References

Adair, J. (2006). *Leadership and Motivation: The Fifty-Fifty Rule and the Eight Key Principles of Motivating Others*. Kogan Page, London.

Allen, N.J., and Meyer, J.P. (1993), "Organizational commitment: Evidence of career stage effects?" *Journal of Business Research*, Vol. 26, pp. 49-61.

Amabile, T.M. (1993), "Motivational synergy: Toward new conceptualizations of intrinsic and extrinsic motivation in the workplace", *Human Resource Management Review*, Vol. 3 No. 3, pp. 185-201.

Avery, D.R., Tonidandel, S., Griffith, K.H. and Quinones, M.A. (2003), "The impact of multiple measures of leader experience on leader effectiveness: New insights for leader selection", *Journal of Business Research*, Vol. 56 No. 8, pp. 673-679.

Barber, M. and Mourshed, M. (2007), "How the world's best-performing schools systems come out on top", McKinsey & Company.

Bartel, A.P. (1994), "Productivity gains from the implementation of employee training programs", *Industrial Relations: A Journal of Economy and Society*, Vol. 33 No. 4, pp. 411-425.

Bass, B.M. and Avolio, B.J. (1994), "Shatter the glass ceiling: Women may make better managers", *Human Resource Management*, Vol. 33, pp. 549-560.

Black, J.S. and Gregersen, H.B. (2000), "High impact training: Forging leaders for the global frontier", *Human Resource Management*, Vol. 39, pp. 173-184.

Brimeyer, T.M., Perrucci, R. and Wadsworth, S.M. (2010), "Age, tenure, resources for control, and organizational commitment", *Social Science Quarterly*, Vol. 91 No. 2, pp. 511-530.

Burke, L.A. and Hutchins, H.M. (2007), "Training transfer: An integrative literature review", *Human Resource Development Review*, Vol. 6, No. 3, pp. 263-296.

Camilleri, E. (2007), "Antecedents affecting public service motivation", *Personnel Review*, Vol. 36 No 3, pp.356-377.

Carpenter, M.A., Geletkanycz, M.A. and Sanders, W.G. (2004), "The upper echelons revisited: Antecedents, elements, and consequences of top management team composition", *Journal of Management*, Vol. 30, pp. 749-778.

Chizema, A., Kamuriwo, D.S. and Shinozawa, Y. (2015), "Women on corporate boards around the world: Triggers and barriers", *The Leadership Quarterly*, Vol. 26, pp. 1051-1065.

Clarke, N. (2012), "Evaluating leadership training and development: A levels-of-analysis perspective", *Human Resource Development Quarterly*, Vol. 23, pp. 441-460.

Cleveland, J.N. and Shore, L.M. (1992), "Self-and supervisory perspectives on age and work attitudes and performance", *Journal of Applied Psychology*, Vol. 77 No. 4, pp. 469-484.

Cohen, A. (1993), "Organizational commitment and turnover: A meta-analysis", *Academy of Management Journal*, Vol. 36 No. 5, pp. 1140-1157.

Coulson, A.J. (2009), "Comparing public, private and market schools", *Journal of School Choice*, Vol. 3, pp. 31-54.

Day, C. and Bakioglu, A. (1996), "Development and disenchantment in the professional lives of headteachers", in Goodson, I. & and. Hargreaves, A (Eds.), *Teachers' Professional Lives*, Routledge Falmer, London, pp. 205-227.

Day, C., Sammons, P. and Hopkins, D. (2009), "Impact of school leadership on pupil outcomes", *Final report*. University of Nottingham and The National College for School Leadership.

De Lange, A.H., Van Yperen, N.W., Van der Heijden, B.I. and Bal, P.M. (2010), "Dominant achievement goals of older workers and their relationship with motivation-related outcomes", *Journal of Vocational Behavior*, Vol. 77, No. 1, pp. 118-125.

Delaney, J.T. and Huselid, M.A. (1996), "The impact of human resource management practices on perceptions of organizational performance", *Academy of Management Journal*, Vol. 39 No. 4, pp. 949-969.

DeMoulin, D.F. (1992), *Demographic Characteristics Associated With Perceived Self Efficacy Levels of Elementary, Middle, and Secondary Principals*. ERIC.

Dezsö, C.L. and Ross, D.G. (2012), "Does female representation in top management improve firm performance? A panel data investigation", *Strategic Management Journal*, Vol. 33 No. 9, pp. 1072-1089.

Eagly, A.H. (2007), "Female leadership advantage and disadvantage: Resolving the contradictions", *Psychology of Women Quarterly*, Vol. 31, pp. 1-12.

Eagly, A.H., Johannesen-Schmidt, M.C. and van Engen, M.L. (2003), "Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men", *Psychological Bulletin*, Vol. 129, No. 4, pp. 569-591

Eagly, A.H., Karau, S.J. and Johnson, B.T. (1992), "Gender and leadership style among school principals: A meta-analysis", *Educational Administration Quarterly*, Vol. 28 No. 1, pp. 76-102.

Ennis, G.E., Hess, T.M. and Smith, B.T. (2013), "The impact of age and motivation on cognitive effort: implications for cognitive engagement in older adulthood", *Psychology and Aging*, Vol. 28 No. 2, pp. 495-504.

Eriksson, T. and Ortega, J. (2006), "The adoption of job rotation: Testing the theories", *Industrial & Labor Relations Review*, Vol. 59, pp. 653-666.

Eyal, O. and Roth, G. (2011), "Principals' leadership and teachers' motivation: Self-determination theory analysis", *Journal of Educational Administration*, Vol. 49 No. 3, pp. 256-275.

Fernet, C., Senécal, C., Guay, F., Marsh, H. and Dowson, M. (2008), "The work tasks motivation scale for teachers (WTMST)", *Journal of Career Assessment*, Vol. 16 No. 2, pp. 256-279.

Festing, M., Knappert, L. and Kornau, A. (2015), "Gender-specific preferences in global performance management: An empirical study of male and female managers in a multinational context", *Human Resource Management*, Vol. 54, pp. 55-79.

Friedman, I.A. (2000), "Burnout in teachers: Shattered dreams of impeccable professional performance", *Journal of Clinical Psychology*, Vol. 56 No. 5, pp. 595-606.

Gabarro, J.J. (1987), *The Dynamics of Taking Charge*. Harvard Business Press, Boston, MA.

Glass, C. and Cook, A. (2016), "Leading at the top: Understanding women's challenges above the glass ceiling", *The Leadership Quarterly*, Vol. 27, pp. 51-63.

Gondhalekar, V. and Dalmia, S. (2007), "Examining the stock market response: A comparison of male and female CEOs", *International Advances in Economic Research*, Vol. 13 No. 3, pp. 395-396.

Greenfield, W. (1977), Administrative Candidacy: A process of new-role learning. Part I. *Journal of Educational Administration*, Vol. 15, pp. 30-48.

Greiner, L.E. and Bhambri, A. (1989), "New CEO intervention and dynamics of deliberate strategic change", *Strategic Management Journal*, Vol. 10(S1), pp. 67-86.

Hackman, J.R. and Oldham, G.R. (1976), "Motivation through the design of work: Test of a theory. *Organizational Behaviour and Human Performance*, Vol. 16 No. 2, pp. 250-279.

Hakanen, J.J., Bakker, A.B. and Schaufeli, W.B. (2006), "Burnout and work engagement among teachers", *Journal of School Psychology*, Vol. 43 No. 6, pp. 495-513.

Hall, D.T. and Mansfield, R. (1975), "Relationships of age and seniority with career variables of engineers and scientists", *Journal of Applied Psychology*, Vol. 60 No. 2, pp. 201-210.

Hambrick, D.C. (1989), "Guest editor's introduction: Putting top managers back in the strategy picture", *Strategic Management Journal*, Vol. 10(S1), pp. 5-15.

Hambrick, D. C. (2007), "Upper echelons theory: An update", *Academy of Management Review*, Vol. 32 No. 2, pp. 334-343.

Hambrick, D.C. and Fukutomi, G.D. (1991), "The seasons of a CEO's tenure", *Academy of Management Review*, Vol. 16 No. 4, pp. 719-742.

Hambrick, D.C. and Mason, P.A. (1984), "Upper echelons: The organization as a reflection of its top managers", *Academy of Management Review*, Vol. 9, pp. 193-106.

Harden, R.M. (1999), "Stress, pressure and burnout in teachers: Is the swan exhausted?" *Medical Teacher*, Vol. 21 No. 3, pp. 245-247.

Hrebiniak, L.G. and Alutto, J.A. (1972), "Personal and role-related factors in the development of organizational commitment", *Administrative Science Quarterly*, Vol. 17 No. 4, pp. 555-573.

Huang, J. and Kisgen, D.J. (2013), "Gender and corporate finance: Are male executives overconfident relative to female executives?" *Journal of Financial Economics*, Vol. 108, pp. 822-839.

Jalbert, T., Jalbert, M. and Furumo, K. (2013). The relationship between CEO gender, financial performance and financial management. *Journal of Business and Economics Research*, Vol. 11 No 1, pp. 25-33.

Katz, R. (1980), "Managing Careers: The Influence of Job and Group Longevities", in Katz R. (ed.) *Career Issues in Human Resource Management*. Prentice-Hall, Englewood Cliffs, NJ.

Kaur, K. and Sandhu, H.S. (2010), "Career stage effect on organizational commitment: Empirical evidence from Indian banking industry", *International Journal of Business & Management*, Vol. 5, pp. 141-152.

Khan, W.A. and Vieito, J.P. (2013), "CEO gender and firm performance", *Journal of Economics and Business*, Vol. 67, pp. 55-66.

Klassen, R.M. and Chiu, M.M. (2010), "Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress", *Journal of Educational Psychology*, Vol. 102 No. 3, pp. 741-756.

Knight, D., Pearce, C., Smith, K.G., Olian, J.D., Sims, H.P., Smith, K.A. and Flood, P.C. (1999), "Top management team diversity, group processes and strategic consensus", *Strategic Management Journal*, Vol. 20, pp. 445-465.

Knoke, D. and Kalleberg, A.L. (1994), "Job training in US organizations", *American Sociological Review*, Vol. 59 No. 4, pp. 537-546.

Kooij, D.T., De Lange, A.H., Jansen, P.G., Kanfer, R. and Dikkers, J.S. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, Vol. 32 No. 2, pp. 197-225.

Krishnan, H.A. and Park, D. (2005), "A few good women—on top management teams", *Journal of Business Research*, Vol. 58, pp. 1712-1720.

Krüger, M.L. (2008), "School leadership, sex and gender: Welcome to difference", *International Journal of Leadership in Education*, Vol. 11, No. 2, pp. 155-168.

Krüger, M.L., Van Eck, E. and Vermeulen, A. (2005), "Why principals leave: Risk factors for premature departure in the Netherlands compared for women and men", *School leadership & Management*, Vol. 25 No. 3, pp. 241-261.

Kunze, F., Raes, A.M. and Bruch, H. (2015), "It matters how old you feel: Antecedents and performance consequences of average relative subjective age in organizations", *Journal of Applied Psychology*, Vol. 100 No. 5, pp. 1511-1526.

Kutner, M.H., Nachtsheim, C.J. and Neter, J. (2004), "Applied linear regression models (4th edition)", McGraw-Hill, Irwin.

Lee, V.E., Smith, J.B. and Cioci, M. (1993), "Teachers and principals: Gender-related perceptions of leadership and power in secondary schools", *Educational Evaluation and Policy Analysis*, Vol. 15 No. 2, pp. 153-180.

Manolopoulos, D. (2007), "An evaluation of employee motivation in the extended public sector in Greece", *Employee Relations*, Vol. 30 No. 1, pp. 63-85.

Marquardt, D.W. and Snee, R. D. (1975), *Ridge Regression in Practice*. *American Statistician*, Vol. 29, pp. 3-20.

McCall, M.W., Lombardo, M.M. and Morrison, A.M. (1988), *Lessons of Experience: How Successful Executives Develop on the Job*, The Free Press: New York.

Miller, D. and Friesen, P.H. (1984), "A longitudinal study of the corporate life cycle", *Management Science*, Vol. 30 No. 10, pp. 1161-1183.

Mor-Barak, M.E. (1995), "The meaning of work for older adults seeking employment: The generativity factor", *The International Journal of Aging and Human Development*, Vol. 41 No. 4, pp. 325-344.

Natarajan N.K. and Nagar, D. (2011), "Effects of service tenure and nature of occupation on organizational commitment and job satisfaction", *Journal of Management Research*, Vol. 11, pp. 59-64.

Ng, T.W. and Feldman, D.C. (2012), "Evaluating six common stereotypes about older workers with meta☐analytical data", *Personnel Psychology*, Vol. 65 No. 4, pp. 821-858.

Nielsen, S. and Huse, M. (2010), "The contribution of women on boards of directors: Going beyond the surface", *Corporate Governance: An International Review*, Vol. 18 No. 2, pp. 136-148.

Nohria, N., Groysberg, B. and Lee, L.E. (2008), "Employee motivation. A powerful new model", *Harvard Business Review*, Vol. 86, pp. 78-84.

OECD (2015), *Igualdad de Género y Derechos de la Mujer en la Agenda Post-2015*. OECD Publishing, París.

OECD (2016), *Education at a Glance: OECD Indicators*. OECD Publishing, París.

Park, D.C. (2000), "The basic mechanisms accounting for age-related decline in cognitive function", *Cognitive Aging: A Primer*, Vol. 11 No 1, pp. 3-19.

Patton, D., Marlow, S. and Hannon, P. (2000), "The relationship between training and small firm performance; research frameworks and lost quests", *International Small Business Journal*, Vol. 19 No 1, pp. 11-27.

Phillips, J.J. (2012), *Return on Investment in Training and Performance Improvement Programs*. Routledge, London.

Rego, A., Sousa, F., Pina e Cunha, M., Correia, A. and Saur☐Amaral, I. (2007), "Leader Self-reported emotional intelligence and perceived employee creativity: An exploratory study. *Creativity and Innovation Management*, Vol. 16 No. 3, pp. 250-264.

Rosener, J.B. (1990), "Ways women lead", *Harvard Business Review*, Vol. 68 No. 6, pp. 119-125.

Rouiller, J.Z. and Goldstein, I.L. (1993), "The relationship between organizational transfer climate and positive transfer of training", *Human Resource Development Quarterly*, Vol. 4 No. 4, pp. 377-390.

Rudow, B. (1999), "Stress and burnout in the teaching profession: European studies, issues, and research perspectives", in Vandenberghe, R. & Huberman, A.M. (Eds.), *Understanding and Preventing Teacher Burnout: A Sourcebook of International Research and Practice*, Cambridge University Press, pp. 38-58.

Salas, E., Tannenbaum, S.I., Kraiger, K. and Smith-Jentsch, K.A. (2012), "The science of training and development in organizations: What matters in practice", *Psychological Science in the Public Interest*, Vol. 13 No. 2, pp. 74-101.

Scaduto, A., Lindsay, D. and Chiaburu, D.S. (2008), "Leader influences on training effectiveness: motivation and outcome expectation processes", *International Journal of Training and Development*, Vol. 12 No. 3, pp. 158-170.

Settersten Jr, R.A. and Mayer, K.U. (1997), "The measurement of age, age structuring, and the life course", *Annual Review of Sociology*, Vol. 23 No. 1, pp. 233-261.

Sterns, H.L. and Doverspike, D. (1989), "Aging and the training and learning process", in Goldstein I.L. (ed.), *Frontiers of Industrial and Organizational Psychology*, *The Jossey-Bass Management Series and The Jossey-Bass Social and Behavioral Science Series. Training and Development in Organizations*. Jossey-Bass, San Francisco, pp. 299-332.

Sterns, H.L. and Miklos, S.M. (1995), "The aging worker in a changing environment: Organizational and individual issues", *Journal of Vocational Behavior*, Vol. 47 No 3, pp. 248-268.

Storey, D.J. (2004), "Exploring the link, among small firms, between management training and firm performance: a comparison between the UK and other OECD countries", *The International Journal of Human Resource Management*, Vol. 15 No. 1, pp. 112-130.

Tai, W.T. (2006), "Effects of training framing, general self-efficacy and training motivation on trainees' training effectiveness", *Personnel Review*, Vol. 35 No. 1, pp. 51-65.

Tang, S. Y., Wong, A. K. and Cheng, M. M. (2015), "The preparation of highly motivated and professionally competent teachers in initial teacher education", *Journal of Education for Teaching*, Vol. 41 No. 2, pp. 128-144.

Tschannen-Moran, M. and Hoy, A.W. (2007), "The differential antecedents of self-efficacy beliefs of novice and experienced teachers", *Teaching and Teacher Education*, Vol. 23 No. 6, pp. 944-956.

Van Maanen, J. and Schein, E. H. (1979), "Toward a theory of organizational socialization", *Research in Organizational Behavior* (Vol. 1).

Velada, R., Caetano, A., Michel, J.W., Lyons, B.D. and Kavanagh, M.J. (2007), "The effects of training design, individual characteristics and work environment on transfer of training", *International Journal of Training and Development*, Vol. 11 No. 4, pp. 282-294.

Vera, D. and Crossan, M. (2004), "Strategic leadership and organizational learning", *Academy of Management Review*, Vol. 29 No. 2, pp. 222-240.

Watt, H. M. and Richardson, P. W. (2008), "Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers", *Learning and Instruction*, Vol. 18 No. 5, pp. 408-428.

Weindling, D. (1999), "Stages of headship", in Bush, T., Bell, L., Bolam, R., Glatter, R. and Ribbins, P. (eds.), *Educational Management: Redifining Theory, Policy and Practice*, Paul Chapman Publishing, London, pp. 90-101.

Westphal, J.D. and Fredrickson, J.W. (2001), "Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy", *Strategic Management Journal*, Vol. 22 No. 12, pp. 1113-1137.

Word, J. and Park, S.M. (2015), "The new public service? Empirical research on job choice motivation in the nonprofit sector", *Personnel Review*, Vol. 44 No. 1, pp. 91-118.

Zacher, H. and Frese, M. (2009), "Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective", *Psychology and Aging*, Vol. 24 No 2, pp. 487-493.

Zacher, H., Rosing, K. and Frese, M. (2011), "Age and leadership: The moderating role of legacy beliefs", *The Leadership Quarterly*, Vol. 22 No. 1, pp. 43-50.

TABLE 1

Means, Standard Deviations and Correlations

	Mean	S.D.	VIF	1	2	3	4	5	6	7	8	9	10
1. Teacher motivation	0.76	0.317											
2. Organization ownership	1.50	0.652	1.287	0.181									
3. Leadership style	0.75	0.434	1.322	0.095	0.171								
4. Teacher specialization	0.82	0.249	1.242	0.065	-0.295**	0.151							
5. Teacher workload	2.71	0.692	1.119	-0.155	-0.086	0.249*	-0.050						
6. Teacher recognition	3.13	0.557	1.131	0.458**	0.146	0.082	-0.117	-0.033					
7. Principal's gender	0.38	0.488	1.211	-0.029	0.066	0.080	0.043	0.036	-0.177				
8. Principal's age	4.73	0.775	1.158	-0.085	-0.041	-0.137	0.003	-0.001	-0.013	-0.008			
9. Principal's tenure	2.52	0.900	1.437	0.028	-0.301**	-0.117	0.036	-0.015	-0.015	-0.156	0.483**		
10. Principal's seniority	3.98	0.909	1.216	0.038	-0.130	-0.232*	-0.171	0.048	-0.054	-0.027	0.102	0.210*	
11. Principal's training	0.72	0.449	1.209	0.222*	0.209*	-0.012	-0.178	-0.011	0.260**	-0.173	0.007	0.200*	-0.107

N= 105; * $p<0.05$; ** $p<0.01$.

Table 2. Hierarchical multiple regression analysis (dependent variable = *Personnel motivation*)

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	-0.020***	-0.056	0.146	0.160	-0.207	-0.034	-0.080
	(0.227)[1]	(0.230)	(0.277)	(0.248)	(0.255)	(0.226)	(0.296)
Organization ownership	0.041	0.035	0.041	0.035	0.050	0.030	0.025
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)
Leadership style	0.036	0.034	0.025	0.007	0.058	-0.044	0.042
	(0.065)	(0.065)	(0.065)	(0.066)	(0.066)	(0.064)	(0.066)
Teacher specialization	$0.187^{\dagger}$	-0.181	$0.190^{\dagger}$	0.166	$0.216^{\dagger}$	$0.202^{\dagger}$	0.225*
	(0.111)	(0.111)	(0.111)	(0.111)	(0.112)	(0.101)	(0.109)
Teacher workload	$-0.071^{\dagger}$	$-0.072^{\dagger}$	-0.070	$-0.073^{\dagger}$	$-0.075^{\dagger}$	$-0.071^{\dagger}$	-0.082*
	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)	(0.038)
Teacher recognition	0.242***	0.254***	0.243***	0.245***	0.245***	0.225***	0.237***
	(0.047)	(0.049)	(0.047)	(0.047)	(0.047)	(0.048)	(0.048)
Principal's gender		0.059					0.059
		(0.055)					(0.056)
Principal's age			-0.035				-0.018
			(0.033)				(0.034)
Principal's tenure				$-0.051^{\dagger}$			$-0.055^{\dagger}$
				(0.030)			(0.033)
Principal's seniority					0.046		0.070*
					(0.030)		(0.030)
Principal's training						0.094	0.134*
						(0.060)	(0.161)
R^2	0.272	0.281	0.280	0.294	0.291	0.291	0.363
ΔR^2	0.272***	0.009	0.008	$0.022^{\dagger}$	0.018	0.018	0.091*
Adjusted-R^2	0.234	0.235	0.235	0.249	0.245	0.245	0.292
F-test	7.107***	6.122***	6.107***	6.526***	6.419***	6.417***	5.130***
N	105	105	105	105	105	105	105

[1] Standard errors in brackets. ***$p<0.001$; **$p<0.01$; *$p<0.05$; $^{\dagger}p<0.10$.

FIGURE 1

The proposed research model

Demographic characteristics

Professional development characteristics

Gender	

Hypothesis 1

Hypothesis 3

Tenure	

EMPLOYEE MOTIVATION

Hypothesis 4

Seniority	

Age	

Hypothesis 2

Hypothesis 5

Training	

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