Determinants of Middle Leaders' Career Aspirations: Principalship Support, Organisational Arrangements, and Efficacy Beliefs in Italy

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Purpose This article engages with three sources of middle leaders' aspirations for school leadership: support from principals, organisational arrangements, and perceptions of competencies and efficacy beliefs.

Design/methodology/approach Formal leadership positions, related competencies, and efficacy beliefs are investigated on the background of school arrangements in a low school autonomy system. Stepwise logistic regressive models have been used from a large dataset of 9,324 teachers in 519 schools in five Italian regions.

Findings Two positions increase the likelihood of aspiring to become a principal, i.e., acting as a vice principal and serving as fundraising leader. Collective efficacy is negatively correlated to aspirations, which can be mainly explained by the reduced principal responsibilities in Italy.

Practical implications Principals' support is essential for adequate preparation and nurturing aspirations. Despite systemic barriers, Italian leaders show an inclination for leadership practices.

Originality/value Since scholarship has not yet significantly addressed supportive leadership practices or efficacy beliefs, this article focuses on the organisational factors that fuel principalship aspirations. Additionally, the findings are based on a large national dataset.

Introduction

While teachers rank first worldwide as prospective principals, most countries have developed either career pathways or pipeline trajectories that ensure progression from middle leadership positions. School leadership practices that support middle leaders (MLs from now on) in aspiring to principalship careers, as well as the diverse leadership positions and tasks they undertake, are key in determining their aspirations. This study, therefore, focuses on aspirations shaped by MLs' experiences in one country context. The rationale is that while scholarship has

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explored a range of intrinsic and extrinsic factors, including personal, professional, and contextual variables, research on ML roles and aspirations to become principals is largely underdeveloped.

School leadership support has been extensively studied as a mediating factor in teachers' decisions to become principals (Busher, 2005; Rhodes & Brundrett, 2009). However, supportive leadership practices as determinants of teacher aspirations and collective efficacy beliefs still require further attention. In this study, MLs hold formal leadership positions, such as vice principals and teachers who are assigned specific leadership roles (Gurr, 2023; Tang et al., 2022). While broader scholarship addressed ML positions, such as department heads, vice-principals, or deputy heads (Leithwood, 2016; Myung et al., 2011), an overview of intermediate positions, with exemplification from one context, is lacking (Bennett et al., 2007; Harris & Jones, 2019).

Given the structural limitations of low school autonomy and low-stakes accountability in Italy (Ferrer-Esteban & Pagès, 2024), the career pathway for school principals is highly unpredictable. Career choices are often based on subjective experiences and aspirations, rather than formal ML experience (Gurr & Drysdale, 2012; Oplatka & Tamir, 2009). This subjective dimension highlights why respondents hold differing views regarding progression to principalship. This study focuses on organisational support in a country with reduced school autonomy and principalship powers. Middle leadership refers to (1) specific tasks assigned beyond their teaching duties by teachers collectively (2) subject and year-group coordination, and (3) Posts of responsibility assigned by the principal.

In this article, three potential sources of MLs' aspirations for principalship are discussed: (S1) the Principal's supportive leadership, as perceived by teachers in middle leadership positions; (S2) Broader organisational arrangements, such as the process of task delegation, the level of decision-making autonomy, in a context of low stakes accountability, lack of motivators and resources for professional development; (S3) The type of positions, roles and tasks leading to ML's self and collective efficacy. The research hypothesis is that all these factors define the working environment where teachers potentially develop principalship aspirations, a sense of efficacy beliefs, and self-esteem. This research project was launched in 2018 in five Italian regional school districts, namely Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Piedmont, and Tuscany.

Background and research questions

In Italy, teachers are often encouraged to undertake particular responsibilities for which they receive a modest allowance. Therefore, the motivation to take on other roles besides teaching is amply intrinsic. The commitment and capabilities teachers acquire beyond teaching are not supported or rewarded, and remain primarily performed on a voluntarily basis. Middle leadership occurs through formal positions that are not recognised for career promotion. The possibility of having the time and space to engage in leadership roles is critically limited by the fact that working time coincides with teaching time, so most teachers will volunteer during their contractual hours.

Within this context, the article seeks to answer three main research questions:

RQ1 Do principalship-supportive practices determine MLs' career aspirations?

RQ2 What aspects of ML positions and related competencies can be conducive to a principalship career?

RQ3 How do MLs' self and collective efficacy determine aspirations?

Theoretical Framework: Progression to principalship through principals' support, performed tasks, and efficacy beliefs.

It is well-known that leaders act at the intersection of their personal and institutional histories (Hammersley-Fletcher & Strain, 2011). In addition, the organisation poses relevant challenges, particularly in low-school autonomy systems. As Gurr and Drysdale (2012) maintain, "[t]oo many people in leadership roles are not leaders, do not expect to be leaders, and do not have the organisational support to be leaders" (p. 62).

What aspects of the MLs' experience can be conducive to a career in principalship?

A global challenge in recruiting and retaining school leaders is also evident in the career progression to principalship. For instance, 70% of British MLs do not aspire to become principals, while 43% of deputies do (Fluckiger et al., 2020). Scholarship on how MLs pursue their career to principalship is relatively scant. The extant body of research has engaged with effective MLs (Gurr & Drysdale, 2012; Hirsh & Bergmo-Prvulovic, 2019; Lipscombe et al., 2020) or school improvement processes (Lipscombe et al., 2023). Some indirect suggestions can be found in studies related to principal recruitment. Three main points must be considered before summarising the available data from both research strands. First, recruitment to principalship is a complex endeavour in most countries (e.g., England, Australia, the USA). In addition, the motivation for the profession converges in some respects, as well as diverges between country contexts, depending on the system of governance and organisational environments. For example, enhanced salary is seen an essential motivator for US teachers, while increased freedom in the daily routine is a crucial aspect in Germany (Hancock & Müller, 2009). Second, beyond formal ML positions, informal responsibilities and roles are equally important predictors of nurturing principalship aspirations and defining what an ML is. Lipscombe and colleagues (2023) suggest moving away from focusing on roles and tasks and instead concentrating on leadership in teaching and learning. Therefore, while it is necessary to acknowledge that MLs engage in informal tasks and contribute to distributed leadership (Leithwood et al., 2020), precision and accuracy in defining their functions and roles are also crucial for their efficacy. As an activity, middle leadership can occur informally (De Nobile, 2018), often exerted by talented teachers, and is envisioned as fluid teachers' leadership (Mincu & Granata, 2021). While acknowledging the relevance of competencies acquired outside formal responsibilities, our premise is that performing an ML role leads to feelings of preparedness. Third, research confirms that new teachers share career aspirations for principalship at an early stage (Reeves & Lowenhaupt, 2016) and that the initial motivation to enter the teaching profession is a critical component that fuels aspirations.

Do the principalship practices determine ML career aspiration?

Principalship practices influence the career aspirations of all staff, including MLs. Conversely, "overly bureaucratic and hierarchical structures, called mindless and inhibiting structures […], are barriers to effective leadership" (Gurr & Drysdale, 2012, p. 66). Additionally, when school-level preparation for leadership roles is lacking, career aspirations are negatively affected. Leadership development is essentially a self-managed process, and MLs complain and feel frustrated about the lack of their own development (Hirsh & Bergmo-Prvulovic, 2019). Principals can influence teachers' inclination for leadership positions (Reeves & Lowenhaupt, 2016). At the same time, principalship and school-level factors are determinants of teachers' autonomy and efficacy, with participative management serving as a mediator of teachers' empowerment (Lu et al., 2015). Similarly, collective leadership can affect teachers' motivation, but its effect should not be overestimated (Leithwood & Mascall, 2008). Most significantly, cohesive leadership has a powerful impact on teachers' and MLs' job satisfaction and commitment (Hulpia et al., 2009). Principal's expectations, support, and role modelling serve in selecting and retaining teachers in middle leadership positions (e.g., Gurr et al., 2019). Support from senior leaders is therefore essential to identify leaders at all levels and position them for possible succession (Rhodes & Brundrett, 2009). On the other hand, a lack of professional and institutional support reportedly limited teachers' opportunities for professional development and hindered their progress (e.g., Draper & McMichael, 2003). Trust and support are two key ingredients that enable teachers to feel encouraged and motivated and aspire to positions of responsibility. In a nutshell, support and guidance are critical ingredients as teachers progress to middle leadership. In a nutshell, support and guidance are critical ingredients as teachers progress to middle leadership.

How did MLs' self and collective efficacy determine aspirations?

Self-efficacy refers to the teachers' individual beliefs about the ability to perform a task successfully and positively influence the results and the context in which they work (Leithwood & Jantzi, 2008; Paletta, Alivernini & Manganelli, 2017). In addition, collective self-efficacy tends to measure MLs' confidence in their ability to achieve collective results (Elliott et al., 2022), to engage with innovative teaching practices, and the creation of a learning community. Nurturing a learning community implies working with people and creating support structures and spaces that act as enablers for personal and collective learning. This aligns with Bandura's (2000) concept of proxy efficacy, as one's ability to accomplish a goal requires the support of others. The research yields interesting results when considering how different positions affect the effectiveness of performing various tasks. First, the most effective MLs are found in the instructional area as learning architects and curriculum strategists (Gurr & Drysdale, 2012). Most significantly, less effective middle-level leaders have been found to focus almost exclusively on administrative routine tasks (Gurr & Drysdale, 2012). Linked to this, specific patterns of leadership distribution, rather than random default positions of middle leadership, contribute to teachers' self and collective efficacy (Harris, Jones & Ismail, 2022). Various studies (e.g., Liu et al., 2021; Zheng et al., 2019; and Choi, 2023) reveal how distributed forms of leadership enhance teachers' self-efficacy. Second, on

a self-efficacy plan, prospective applicants with high confidence in performing as teachers showed greater interest in principalship than those with low confidence. In addition, since individuals need to develop their own customised individual development and career plans rather than rely on the system or school (Gurr & Drysdale, 2012), self-efficacy is reasonably expected to predict principalship aspirations. Similar to self-efficacy, collective efficacy beliefs are strengthened by directly observing successful individuals and organisations, especially those that attain similar goals when confronted with familiar opportunities and obstacles (Goddard & Skrla, 2006). In this sense, the social organisation can influence collective efficacy beliefs. In a recent study (Elliott et al., 2022), collective efficacy entailed nurturing the leadership of self, others, and the school. This suggests prioritising deeper horizontal and vertical collaboration across the school.

Low-school autonomy as a context

Italian principals act as "public officials". The administrative tradition is characterised by a legalistic attitude, limited technical preparation, and restricted decisional autonomy at the organisational level. Since human resources and finance are primarily outside the school's sphere of influence, principals perform mainly administrative functions. Similar to France and Germany (Hancock & Müller, 2009), a principal is a *primus inter pares* legal supervisor and, to a limited extent, an instructional or organisational leader. Therefore, the Italian school system is characterised by fragmented cultures, a certain degree of rule-bound thinking, and formal egalitarianism. In highly bureaucratic systems, the capacity to act with leadership is limited for both principals and teachers (Mincu & Granata, 2021; Printy & Liu, 2021). Most significantly, MLs are elected by the teachers' assembly, a powerful decision-making body, and their actions can contradict the vision formulated by principals.

Teachers act as MLs in a state-managed school, whose structure can be described as a flat hierarchy (Brown & Malin, 2022). All teachers report only to the principal, who is recognised as the legal head of the school. Principals cannot recruit or pay salaries, but they can engage with some practices of strategic direction. The school autonomy law of 1997 introduced organisational tasks in four areas: (1) managing the overall educational programme; (2) supporting teachers' work; (3) planning students' services; and (4) implementing school projects in partnerships with external institutions. Principals can delegate these tasks, but their overall number is established by the teachers' assembly. Through the delegated responsibilities, a relationship of trust can sometimes be established. In addition, they can choose the vice-principal, a non-formal and non-mandatory position; heads of department; section leaders;

year, programme, and year group leaders. The so-called 'delegated tasks' shape an *ad hoc* structure of MLs. Teachers carry out these additional responsibilities beyond their contractual teaching time and without formal influence over their peers. A variety of ML positions (see Table 2) can indirectly affect teaching and learning by preparing the educational programme, the self-assessment report, and the school improvement plan.

Data collection

The surveyed pool of MLs exhibits several key features: women (84%), 4-year bachelor's and master's degrees (45%), open-ended contracts (97%), and 61% work 18 hours a week, which corresponds to their official teaching time. Teachers appear to have been tenured for an average of 17 years and pre-tenured for an average of 7 years. Teachers who have been working in the same school for an average of 12 years, with 16% of teachers having a service record of more than 20 years in the same organisation, and who have been deployed to undertake various tasks beyond teaching, have been surveyed. Table 1 shows the frequencies of responses for aspirations, while Table 2 indicates the number and types of roles performed.

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One question aimed to identify determinants of teachers' aspirations to become school leaders: (1) I have a clear aspiration, feel prepared, and plan to take the competitive examination to become a principal; (2) I have a clear aspiration, but I don't feel prepared and ready to become a principal yet; (3) I'm not interested in becoming a principal. Most teachers on middle leadership positions, accounting for approximately 79% (n = 7,249) of the total respondents (n = 9,324), stated that they were not interested in becoming principals. Approximately 8% (n = 742) of the teachers reported that they aspire to and feel prepared for the national principalship selection process. Approximately 13% of teachers (n = 1,189) stated that, despite their aspirations, they felt they needed to be adequately prepared before taking on this role. A small number feel adequately prepared, while a low but significant proportion of MLs highlight the need for 'adequate preparation.' Based on the research questions, the group of teachers interested in learning answered the first option, i.e., "I have a clear aspiration, I feel prepared, and I plan to." Vice principals account for about 17% of middle leadership positions who plan to become principals, . Only about 6% of the 5,173 year group leaders envision principalship, with 20% aspiring to principalship but not feeling prepared and ready.

Measures

To test the research questions, we utilised objective data on positions and personal characteristics, as well as indirect constructs operationalized with different items to measure leadership competencies, experiences, incentives, professional development, and self-efficacy. Table 4 presents the factor loadings for each construct, along with the item composition. We built a set of 51 items to measure leadership competencies (De Nobile, 2018; Kwan, 2011; Walker & Kwan, 2009). The answers were then subjected to a factorial analysis (Principal Component Analysis), from which nine factors were derived (Table 4): (1) professional development; (2) quality assurance and accountability; (3) learning and curriculum management; (4) pedagogical innovation; (5) resource administration; (6) educational programme; (7) stakeholder/parents engagement; (8) reporting and external communication; (9) behaviour management.

The MLs' experiences, incentives and professional development include: (1) experience in roles measured through the positions held in the previous five years; (2) the motivation for a middle leadership position, divided into intrinsic motivations, material extrinsic incentives, and moral/intangible extrinsic incentives (public appreciation); (3) professional development, divided into pedagogical preparatiton and management-related training; (4) the relationship with the principal and the perception of support as a ML. To measure self-efficacy, we included

items assessing both personal and collective self-efficacy beliefs, which reflect MLs' confidence in their ability to influence their schools and manage leadership challenges. *Personal Self-Efficacy* measures the belief in one's own ability to perform leadership tasks effectively, solve problems, and handle administrative and strategic responsibilities. *Collective Self-Efficacy,* on the other hand, measures the perception of the school's collective ability to achieve leadership goals, drive improvements, and foster collaboration among staff.

Model setup

We applied stepwise logistic regression to examine the factors that determine teachers' aspirations for a career as school principals. Stepwise logistic regression offers a more robust analytical approach primarily due to its iterative variable selection process, predictive accuracy, and interpretability. This method enables the identification of the most statistically significant variables contributing to the model, minimising the risk of overfitting by excluding irrelevant predictors that do not improve the model's performance (Leithwood et al., 2020). The individual control factors and middle leadership positions were represented by a set of binary or continuous variables (see Table 3 for descriptive statistics). The logistic model was chosen due to the dichotomous nature of the dependent variable 'aspiration', where, on average, 8% of teachers replied that "I have a clear aspiration. I feel prepared, and I plan" to become a principal. The model is built on a database of 9,324 teachers, of whom 1,931 have a clear aspiration, feel prepared, and plan to participate in the national selection. At the same time, 7,249 respondents indicated that they are not interested in principalship (see Table 1). MLs' competencies, principals' support, professional development, and self-efficacy were standardised through principal component factor analysis. A confirmatory factor analysis was conducted to ensure that factor loadings met the recommended minimum threshold of 0.6 and that the composite reliability (CR) and the average variance extracted (AVE) met the minimum recommended thresholds of 0.7 and 0.4, respectively. In addition, Cronbach's alpha was calculated to assess the internal consistency of the constructs, with an accepted threshold of 0.7 or higher indicating good reliability (Christmann & Van Aelst, 2006). The factors were further verified through Bartlett's test of sphericity with a significance level < 0.05 and the Kaiser-Meyer-Olkin (KMO) over the threshold of 0.. After deleting items that did not ensure good consistency and validity, we proceeded with the identification and labeling of factors (see Table 4). After considering these methodological aspects, we proceeded with five-step models and assessed their reliability (see Table 6). The inclusive model, Model 5, exhibits an increase in *Pseudo-R2*, which is used in logistic regressions as a measure of the model's representativeness and, therefore, its statistical quality. Indeed, Model 1 has a low *Pseudo-R2* of 0.061, which grows to 0.122 with the ML positions block in Model 2, up to 0.168 in Model 3, which also includes the ML competencies. The variables relating to the principal's leadership, the motivation system, and professional development improve the *Pseudo-R2* up to 0.222. Adding the self-efficacy variables brings the *Pseudo-R2* to 0.227, which is considered an index of good statistical representativeness of the data model (Koenker & Machado, 1999). Additionally, the Hosmer-Lemeshow tests for all models are all under acceptable levels ($p > 0.05$) (Hosmer et al., 1997).

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Stepwise models provide a mechanism for comparing the coefficients of each model variable, allowing the calculation of the effect size of each variable. The estimators are, therefore, more robust and consider the effects of each predictor previously included in the model. In our case, five logistic models were created to test the impact of 1) individual characteristics, 2) middle leadership positions, 3) middle leadership competencies, 4) principals support and professional development, and 5) self-efficacy. Table 5 shows how the Models correspond to our RQs and engage with the three sources of MLs' aspirations.

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Data analysis

Individual Characteristics

The results indicate that several individual characteristics significantly influence the likelihood of aspiring to a principalship position. Across all five models, being a secondary school teacher (teaching students aged between 14-19) decreases the probability of aspiring to become a principal, with odds ratios ranging from 0.551 ($p < 0.001$) to 0.790 ($p < 0.01$). Conversely, having a university degree significantly increases the odds of aspiring to principalship, confirming the relationship between higher education and leadership ambitions. Specifically, a university degree increases the probability of pursuing a principalship career by approximately 12.15 to 13.73 times ($p < 0.001$). Regarding age, the results show a small but statistically significant negative effect, as older teachers are less likely to aspire to leadership roles, with odds ratios of approximately 0.981 ($p < 0.001$).

The results show a significant increase in the odds of aspiration for males, with a ratio of about 2.0 to 2.8 times more likely than females to pursue a principalship ($p < 0.001$). In addition, the length of service at the same school negatively affects aspirations.For each year of service, there is a decrease in probability by about 1.8% ($p < 0.001$). Holding a permanent contract shows a significantly higher likelihood of aspiring to become a principal, with odds ratios ranging from 3.573 to 4.507 compared to those who do not ($p < 0.001$). Higher contractual workload is associated with an increased level of aspiration, as indicated by coefficients of 1.807 and 2.050 for Models 1 and 2, respectively ($p < 0.05$). As an additional and final point, personal satisfaction as a teacher has a negative impact on aspirations, with an approximate odds ratio of 0.903 in Model 5 ($p < 0.05$). Time and effort constraints significantly reduce the likelihood, with an odds ratio from 0.824 to 0.918 ($p < 0.001$).

Middle Leadership Positions and Competencies

In this paper we distinguish between positions and roles in leadership. Various formal positions are institutionally recognised and might entail - or not - specific roles, which imply engaging in leadership practices such as instructional, transformational, etc. It is worth noting that teachers in middle-leadership positions are often impacted by traditional horizontal structures,

especially in flat organisations (Brown & Malin, 2022), which makes it more challenging for them to maintain a middle-leading role (Hirsch & Bergmo-Prvulovic, 2019) and, potentially, to nurture aspirations for principalship. The results suggest, in fact, that not all ML positions have a significant impact on principalship aspirations. The vice principal remains the most influential position regarding aspirations for principalship, increasing the likelihood by 1.743 to 2.757 times in all the models ($p < 0.001$). This confirms the importance of the position in pursuing a career in school leadership. Other positions, such as special education needs and inclusion coordinator, school improvement coordinator, school self-assessment coordinator, innovation and project management coordinator, significantly increase the odds of aspiring to principalship in Model 5 ($p < 0.001$). Conversely, head of department, programme leader, and year group leader reduce aspirations, ranging from 0.386 ($p<0.05$) to 0.818 ($p<0.05$). These findings suggest that management and strategic roles strongly predict leadership ambition, while teaching and curriculum-focused positions tend to discourage aspirations for principalship. Middle leadership competencies are introduced in Model 3, referring to the roles that teachers perform on leading positions. Among these competencies, *Quality Assurance and Accountability* emerges as a significant predictor, increasing the likelihood of aspiring to principalship by approximately 1.174 times ($p < 0.001$). On the other hand, *Learning and Curriculum Management* has an adverse effect on leadership aspirations, with odds ratios declining to 0.891 in Model 5 ($p < 0.01$). Teachers focusing on curriculum planning and instructional strategies may experience greater professional fulfilment in improving teaching quality rather than transitioning into broader administrative responsibilities. Two competencies that exhibit a strong positive association with leadership aspirations are *Teaching Innovation* and *Strategic Planning*, with odds ratios of 1.112 ($p < 0.01$) and 1.476 ($p < 0.001$), respectively. *Teaching Innovation* involves the implementation of novel instructional methods, technology-oriented and creative pedagogies. These activities fosters an adaptive mindset, which is an essential characteristic of effective school leaders. *Strategic Planning,* on the other hand, requires teachers to engage in long-term goal setting, resource allocation, and institutional development planning—tasks that are directly aligned with the responsibilities of a principal. Additionally, *Stakeholder Engagement, Reporting, and External Communication* have a positive influence on aspirations, with odds ratios ranging from 1.50 to 1.17 ($p < 0.01$). These competencies involve liaising with parents, external partners, and community stakeholders, as well as managing public relations and school communications. Teachers who frequently interact with external bodies gain valuable experience in negotiation, conflict resolution, and strategic decision-making, which may enhance their readiness for leadership positions.

Motivation, principalship support to professional development and MLs self-efficacy

The number of middle leadership positions held increases aspirations significantly, with odds ratios of 1.150 to 1.151 ($p < 0.001$). Intrinsic and extrinsic motivations were strong predictors, increasing the likelihood by 1.531 and 1.157 times, respectively ($p < 0.001$). On the other hand, supportive leadership from principals decreases aspirations, with odds ratios of 0.694 to 0.726 ($p < 0.001$). This might be due to the high level of satisfaction within their existing role which provides them with a comfort zone. This counterintuitive evidence could explain why the best leaders are successful when they enhance collaboration with their followers rather than creating leadership ambition (Hirschhorn, 1990). In addition, management-focused in-service training significantly increases aspirations (1.474, $p < 0.001$). In contrast, pedagogical in-service training reduces them (0.892, $p < 0.01$), suggesting that teachers with more leadership-oriented training are more likely to seek career advancement. In contrast, those focused on pedagogical

growth are less inclined to pursue principalship roles.The final block of variables includes some determinants of aspirations related to personal and collective self-efficacy. Only personal self-efficacy as a middle leader has a significant effect on the likelihood of increasing aspiration for the principalship (1.201 times ($p < 0.01$)). Collective self-efficacy is not statistically significant.

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Discussion

This study addressed three research questions on career aspiration determinants related to organisational and structural factors.

Do principalship support practices determine ML career aspiration? It is worth noting that the majority of MLs (79%) did not aspire for the principalship. This resonates with other studies (e.g., Oplatka & Tamir, 2009; Bartanen et al., 2021) in that MLs lack the desire to become principals and either never become principals or leave the school leadership pipeline. We acknowledge that understanding the context in which MLs work plays a significant role in their decision to aspire to the principalship. The results show that those occupying middle leadership positions, such as department heads, lack interest in taking on the principalship. This may reflect that their roles involve assisting and supporting principals with instruction tasks. They perform administrative duties that are delegated to them by the principal, aimed at ensuring organisational stability and an orderly climate, rather than leadership tasks. This aspect highlights the weak leadership expectations within Italian schools, where vice principals often do not engage in leadership practices but undertake managerial responsibilities. However, it is worth noting that even a principal's role as a leader is relatively minimal when autonomy and accountability are low. At the same time, given that the supportive leadership scale (Sleegers et al., 2013) clearly shows that leaders who listen, encourage, and empower teachers to take on responsibilities are positively impacted to take on leadership positions as they progress through their careers. The results emphasise the need to nurture engaging relationships. Yet, as already noted, one has to be cautious in drawing any hasty conclusions since some vice principals may end up in a comfort zone that keeps them stuck in their position (see Grant, 2013).

What aspects of ML positions and related competencies can be conducive to a principalship career?

This question explored which particular MLs' positions seem more conducive to the principalship. The results show that those occupying specific positions, such as head of department, programme, or year group leader, lack interest in taking on principalship. One explanation is that their specific roles involve assisting and supporting the teaching process. Conversely, some positions positively affect aspirations, such as those of vice principals, special education needs and inclusion coordinators, school self-assessment and improvement coordinators, innovation and project managementcoordinators. The focus on school improvement contributes to creating proximity with principals, socialising them into principalship practices.

This calls for a review of the way Italian principals mentor and prepare their deputies and other MLs to take on such roles. In this sense, their potential aspirations to leadership "will have an impact on the school's achievement and allow them to participate in sharing the vision of school improvement" (Dunleavy, 2011, p. 22). This requires a different approach to engaging with the school principal. It also sheds light on the need to consider the professional

development of MLs from a 'learning' perspective and draw on their appetite to engage in organisational and leadership practices, which, as this study brought out, increases their aspirations by 58%. Rather than assuming ML as a final destination, Hirsh and Bergmo-Prvulovic (2019) highlight that it represents a "continuous process of exchange" (p. 368) and learning from and with each other.

The desire or lack of principalship aspiration depends on myriad factors. The absence of preparation for the principalship is also evidenced in this study. While acknowledging that middle leadership positions differ significantly from principalship, **coaching, shadowing, and working alongside are essential aspects if succession planning is to take root in the Italian education system**. This reflects the view of 13% of the respondents who feel inadequately prepared for the role. The need for learning opportunities within the school can be a determining factor in future decisions. The fact that those in particular leadership positions, (e.g., related to inclusion and school improvement), foster an interest in expanding their leadership is an exciting finding and worth exploring further. The significance of having exposure to specific roles and tasks is also supported by the high response rate amongst MLs (49%) who do not feel prepared or ready for principalship. This highlights the crucial importance of teacher leadership and, in the context, of the transformational school leader in supporting teachers' direct involvement in school matters (Day et al., 2020). This aspect relates to leadership succession, as the survival and viability of an organisation depends on having the right people in the right place at the right time to do the right things (Rothwell, 2010).

How do MLs' self and collective efficacy determine aspirations?

Findings show that MLs who perceive themselves as capable leaders are more likely to pursue principalship. This aspect aligns with the extant scholarship, emphasising that confidence in one's abilities as a leader strongly predicts career ambitions (Leithwood & Jantzi, 2008; Tschannen-Moran & Gareis, 2004). However, collective efficacy has no significant effect on aspirations in this study. This suggests that collective efforts do not translate into individual career ambitions in a low-autonomy system like Italy, where leadership is fragmented and decision-making is heavily centralised. The lack of a strong professional learning community and a shared leadership culture further weakens the role of collective efficacy in motivating MLs to transition into principal roles. This is an interesting finding especially relevant to the Italian context if it wants to explore delegating more responsibilities and accountability to the school level, thus encouraging more collegial models of leadership.

Conclusions and Implications

Coherence is most unlikely in low autonomy systems (Printy & Liu, 2021). MLs' responsibilities are typically administrative ("ticking boxes") rather than shaping practices outside their classes. Middle leadership in Italy is often found in formal roles that are not recognised for career promotion, are poorly paid, and are frequently performed voluntarily. The possibility of having time and space to engage with such roles is hindered by broader low autonomy arrangements within the existing Italian school system.

However, key findings are aligned with what happens in international high autonomy school systems, namely (1) principals' supportive practices and postures are key to ensuring adequate preparation and nurturing aspirations, (2) despite the many systemic and cultural barriers, there is a significant openness towards organisational learning of leadership practices. A key finding

relates to the high proportion of middle leaders (79%) who do not aspire to become principals. One explanation derives from the types of positions covered and their proximity or distance from principalship tasks and practices. Another reason could relate to the flat organisational structure in this school system, where such roles are less about leadership and more about formal duties, mostly related to the classroom. In this sense, a lack of collective self-efficacy reflects fragmented cultures within the Italian school system, where collegiality and professional preparation at the school level are not the norm. Leadership distribution within schools typically occurs through a random allocation of positions or voluntary self-selection, which entails limited leadership roles associated with these positions, as well as weak collective self-efficacy effects.The study identifies implications for policymakers at the higher levels of the school system and for principals. To effectively draw upon collective efficacy, principals' motivating practices, the full potential of the internal and external community, increased local decision-making processes, principalship autonomy, and increased flexibility are required.

References

Bandura, A. (2000). "Exercise of Human Agency Through Collective Efficacy", *Current Directions in Psychological Science*, Vol. 9 No.3, pp 75–78. https://doi.org/10.1111/1467-8721.00064

Bartanen, B., Rogers, L.K. and Woo, D.S. (2021). "Assistant Principal Mobility and Its Relationship With Principal Turnover", *Educational Researcher,* Vol. 50 No. 6, pp. 368–380. https://doi.org/10.3102/0013189X21993105

Bennett, N., Woods, P., Wise, C. and Newton, W. (2007). "Understandings of middle leadership in secondary schools: A review of 70 empirical research", *School Leadership and Management*, Vol. 27 No. 5, pp. 453-470. https://doi.org/10.1076/0924-3453(200006)11:2;1-Q;FT237

Brown, C. & Malin, J.R. (2022). *The Emerald handbook of evidence-informed practice in education: Learning from international contexts*. Emerald.

Busher, H. (2005). "Being a middle leader: Exploring professional identities", *School Leadership & Management,* Vol. 25 No.2, pp. 137–153. https://doi.org/10.1080/13632430500036231

Christmann, A., and Van Aelst, S. (2006). "Robust estimation of Cronbach's alpha", *Journal of Multivariate Analysis*, Vol. 97 No.7. pp. 1660–1674. https://doi.org/10.1016/j.jmva.2005.05.012

Choi, S. (2023) Distributed Leadership Promotes Teacher Self- Efficacy in Multicultural Classrooms Through School Capacity Building: A Multilevel SEM Approach Using U.S. Teaching and Learning International Survey Educational Administration Quarterly 2023, 59(4) 811–844

Day, C., Sammons, P. and Gorgen, K.(2020). Successful School Leadership, *Education development trust*. https://eric.ed.gov/?id=ED614324

De Nobile, J. (2018). "Towards a theoretical model of middle leadership in schools", *School Leadership & Management*, Vol. 38 No.4, pp. 395–416. https://doi.org/10.1080/13632434.2017.1411902

Draper, J., and McMichael, P. (2003). "The rocky road to headship", *Australian Journal of Education*, Vol. 47 No. 2, pp. 185–196.

Dunleavy, C.-A.S. (2011). *Mobility of assistant principals: Examining their roles, accomplishments, and aspirations*. Fordham University. https://search.proquest.com/openview/acee53f9d200f92c2dd2fbf1a39aa820/1?pq-origsite=gscholar&cbl=18750

Elliott, K., Hollingsworth, H., Thornton, A., Gillies, L. and Henderson, K. (2022). *School leadership that cultivates collective efficacy: Emerging insights 2022*. https://research.acer.edu.au/educational_leadership/10/

Ferrer-Esteban, G., and Pagès, M. (2024). "Teachers gaming the system: Exploring opportunistic behaviours in a low-stakes accountability system", *Educational Assessment, Evaluation and Accountability*, Vol. 36 No. 1, pp. 107–137. https://doi.org/10.1007/s11092-023-09424-3

Fluckiger, B., Lovett, S., Dempster, N. and Brown, S. (2020). "Middle leaders: Career pathways and professional learning needs", *Leading and Managing*, Vol. 21 No. 2, pp. 60–74. https://doi.org/10.3316/informit.164490314492986

Goddard, R.D., and Skrla, L. (2006). "The Influence of School Social Composition on Teachers' Collective Efficacy Beliefs", *Educational Administration Quarterly*, Vol. 42 No. 2, 216–235. https://doi.org/10.1177/0013161X05285984

Gurr, D., and Drysdale, L. (2012). "Tensions and dilemmas in leading Australia's schools", *School Leadership & Management*, Vol. 32 No. 5, pp. 403–420. https://doi.org/10.1080/13632434.2012.723619

Gurr, D., Drysdale, L. Longmuir, F. and McCrohan, K. (2019). "Successful school leadership that is culturally sensitive but not context constrained", *Educational leadership, culture, and success in high-need schools*, 25–44.

Hammersley-Fletcher, L. and Strain, M.(2011). "Power, agency and middle leadership in English primary schools", *British Educational Research Journal,* Vol. 37 No. 5, pp. 871–884. https://doi.org/10.1080/01411926.2010.506944

Hancock, D.R., and Müller, U. (2009). "Different systems—Similar challenges? Factors impacting the motivation of German and U.S. teachers to become school leaders", *International Journal of Educational Research*, Vol. 48 No. 5, pp. 299–306. https://doi.org/10.1016/j.ijer.2010.02.001

Harris, A. and Jones, M. (2019). "Leading professional learning with impact", *School Leadership & Management*, Vol. 39 No. 1, pp. 1–4. https://doi.org/10.1080/13632434.2018.1530892

Harris, A., Jones, M. and Ismail, N. (2022) Distributed leadership: taking a retrospective and contemporary view of the evidence base, School Leadership & Management, 42:5, 438-456, DOI: 10.1080/13632434.2022.2109620

Hirschhorn, L..(1990). "Leaders and Followers in a Postindustrial Age: A Psychodynamic View", *The Journal of Applied Behavioral Science*, Vol 26 No. 4, pp. 529–542. https://doi.org/10.1177/0021886390264008

Hirsh, Å. and Bergmo-Prvulovic,I. (2019). "Teachers leading teachers – understanding middle-leaders' role and thoughts about career in the context of a changed division of labour", *School Leadership & Management*, Vol. 39 No. 3–4, pp. 352–371. https://doi.org/10.1080/13632434.2018.1536977

Hosmer, D.W., Hosmer, T., Le Cessie, S., & Lemeshow, S. (1997). A Comparison of Goodness-of-Fit Tests for the Logistic Regression Model. *Statistics in Medicine*, Vol. 16 No. 9, pp. 965–980. https://doi.org/10.1002/(SICI)1097-0258(19970515)16:9<965::AID-SIM509>3.0.CO;2-O

Hulpia, H., Devos, G. and Van Keer, H. (2009). "The Influence of Distributed Leadership on Teachers' Organizational Commitment: A Multilevel Approach", *The Journal of Educational Research*, Vol. 103 No. 1, pp. 40–52. https://doi.org/10.1080/00220670903231201

Koenker, R. and Machado, J.A.F. (1999). "Goodness of Fit and Related Inference Processes for Quantile Regression", *Journal of the American Statistical Association*, Vol. 94 No. 448, 1296–1310. https://doi.org/10.1080/01621459.1999.10473882

Kwan, P. (2011). “Development of school leaders in Hong Kong: Contextual changes and future challenges”, *School Leadership & Management*, Vol. 31 No. 2, pp. 165–177. https://doi.org/10.1080/13632434.2011.560601

Lee, S.W., and Mao, X. (2023). “Recruitment and selection of principals: A systematic review”, *Educational Management Administration & Leadership*, Vol. 51 No. 1, 6–29. https://doi.org/10.1177/1741143220969694

Leithwood, K. (2016). “Department-Head Leadership for School Improvement”, *Leadership and Policy in Schools*, Vol. 15 No. 2, pp. 117-140 .https://doi.org/10.1080/15700763.2015.1044538

Leithwood, K. and Jantzi, D.(2008). “Linking Leadership to Student Learning: The Contributions of Leader Efficacy”, *Educational Administration Quarterly,* Vol. 44 No. 4, 496–528. https://doi.org/10.1177/0013161X08321501

Leithwood, K. and Mascall, B. (2008). “Collective Leadership Effects on Student Achievement”, *Educational Administration Quarterly* Vol. 44 No.4, pp. 529–561. https://doi.org/10.1177/0013161X08321221

Leithwood, K., Sun, J. and Schumacker, R. (2020). “How School Leadership Influences Student Learning: A Test of The Four Paths Model”, *Educational Administration Quarterly* Vol. 56 No. 4, 570–599. https://doi.org/10.1177/0013161X19878772

Lipscombe, K., Grice, C. Tindall-Ford, S. and De-Nobile, J.. (2020). “Middle leading in Australian schools: Professional standards, positions, and professional development”,*School Leadership & Management*, Vol. 40 No. 5, pp. 406–424. https://doi.org/10.1080/13632434.2020.1731685

Lipscombe, K., Tindall-Ford, S. and Lamanna, J. (2023). “School middle leadership: A systematic review”, *Educational Management Administration & Leadership*, Vol.51 No.2, pp. 270–288. https://doi.org/10.1177/1741143220983328

Liu, Y., Bellibas, MS. and Gümüs, S. (2021). The effect of instructional leadership and distributed leadership on teacher self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration. Educational Management Administration and Leadership, 49(3), 430–453. https://doi.org/ 10.1177/1741143220910438

Lu, J., Jiang, X.,Yu, H. and Li, D. (2015). “Building collaborative structures for teachers’ autonomy and self-efficacy: The mediating role of participative management and learning culture”, *School Effectiveness and School Improvement*, Vol. 26 No. 2, pp. 240–257. https://doi.org/10.1080/09243453.2014.888086

Mincu, Monica, and Anna Granata. (2021). Teachers' informal leadership for equity in France and Italy during the first wave of the education emergency. *Teachers and Teaching* 30(7-8): 932-952. https://doi.org/10.1080/13540602.2021.1986695

Myung, J., Loeb, S. and Horng, E.(2011). "Tapping the Principal Pipeline: Identifying Talent for Future School Leadership in the Absence of Formal Succession Management Programs", *Educational Administration Quarterly*, Vol. 47 No. 5, pp. 695–727. https://doi.org/10.1177/0013161X11406112

Oplatka, I. and Tamir, V. (2009). "I Don't Want to Be a School Head': Women Deputy Heads' Insightful Constructions of Career Advancement and Retention", *Educational Management Administration & Leadership,* Vol. 37 No. 2, pp.216–238. https://doi.org/10.1177/1741143208100299

Paletta, Angelo, Fabio Alivernini, and Sara Manganelli. (2017). "Leadership for learning: The relationships between school context, principal leadership and mediating variables". *International Journal of Educational Management* 31 (2): 98–117. https://doi.org/10.1108/IJEM-11-2015-0152

Printy, S. and Liu, Y. (2021). "Distributed Leadership Globally: The Interactive Nature of Principal and Teacher Leadership in 32 Countries", *Educational Administration Quarterly*, Vol. 57 No. 2, pp. 290–325. https://doi.org/10.1177/0013161X20926548

Reeves, T.D., and Lowenhaupt, R.J. (2016). "Teachers as leaders: Pre-service teachers' aspirations and motivations", *Teaching and Teacher Education*, Vol. 57, pp. 176–187. https://doi.org/10.1016/j.tate.2016.03.011

Rhodes, C. and Brundrett, M. (2009). "Leadership development and school improvement", *Educational Review,* Vol. 61 No.4, pp.361–374. https://doi.org/10.1080/00131910903403949

Rothwell, W. (2010). *Effective succession planning: Ensuring leadership continuity and building talent from within*, Amacom, NY.

Sleegers, P., den Brok, P. Verbiest, E., Moolenaar, N.M. and Daly, A.J. (2013). "Toward Conceptual Clarity: A Multidimensional, Multilevel Model of Professional Learning Communities in Dutch Elementary Schools", *The Elementary School Journal,* Vol. 114 No. 1, pp. 118–137. https://doi.org/10.1086/671063

Tang, J.J., Bryant, D.A. and Walker, A.D. (2022). "School middle leaders as instructional leaders: Building the knowledge base of instruction-oriented middle leadership", *Journal of Educational Administration*, Vol. 60 No. 5, pp. 511–526. https://doi.org/10.1108/JEA-01-2022-0018

Tschannen-Moran, M. and Gareis, C.R. (2004). “Principals’ sense of efficacy: Assessing a promising construct”, *Journal of Educational Administration*, Vol. 42 No. 5, pp. 573–585. https://doi.org/10.1108/09578230410554070

Walker, A. and Kwan, P. (2009). “Linking Professional, School, Demographic, and Motivational Factors to Desire for Principalship”, *Educational Administration Quarterly*, Vol. 45 No. 4, pp. 590–615. https://doi.org/10.1177/0013161X09337895

Zheng, X., Yin, H. and Liu, Y. (2019). The relationship between distributed leadership and teacher efficacy in China: The mediation of satisfaction and trust. Asia-Pacific Education Researcher, 28(6), 509–518. https://doi.org/10.1007/s40299-019-00451-7

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Table 1 – Aspirations to principalship frequencies

“I have a clear aspiration, feel prepared, and plant to take the public selection to become a principal”		"I have a clear aspiration, but I don't feel prepared and ready to become a principal yet”		I'm not interested in becoming a principal	
Freq.	*%*	Freq.	*$*	Freq.	*%*
742	*8,08%*	1.189	*12,95%*	7.249	*78,97%*

Table 2 – Middle leadership positions and aspirations to principalship.

	Which of the following positions are you covering during the current school year?		**I have a clear aspiration, feel prepared, and plant to take the public selection to become a principal**		**I have a clear aspiration, but I don't feel prepared and ready to become a principal yet**		**I'm not interested in becoming a principal**	
	Freq.	***%***	**Freq.**	***%***	**Freq.**	***%***	**Freq.**	***%***

Vice principals	737	*3,01%*	149	*5,68%*	113	*3,38%*	462	*2,54 %*
Head of Department	1.363	*5,56%*	95	*3,62%*	133	*3,98%*	1111	*6,11 %*
Programme Leader	184	*0,75%*	10	*0,38%*	17	*0,51%*	153	*0,84 %*
Year group Leader	5.173	*21,09%*	337	*12,86%*	679	*20,32%*	4077	*22,4 3%*
Special Education Needs and Inclusion Coordinator	673	*2,74%*	83	*3,17%*	112	*3,35%*	464	*2,55 %*
School Improvement Coordinator	839	*3,42%*	125	*4,77%*	127	*3,80%*	571	*3,14 %*
School Self-Assessment Coordinator	1266	*5,16%*	202	*7,71%*	199	*5,95%*	850	*4,68 %*
Innovation and Project Management Coordinator	838	*3,42%*	165	*6,30%*	149	*4,46%*	514	*2,83 %*

** Note: teachers can hold multiple positions and be accounted for multiple times.*

Table 3. Descriptive statistics

	Obs	Mean	Std. dev.	Min	Max
Aspiration	9,324	.2071	.4052495	0	1
Secondary school teacher	9,324	.6886529	.4630692	0	1
University degree	9,324	.7119262	.4528899	0	1
Age	9,324	52.34181	7.940298	22	68
Gender	9,324	1.164522	.3707682	0	1
Length of service in the same school	9,324	.6473616	.4778169	0	1
Open-ended contract	9,324	.9696482	.1715625	0	1
Hours of contractual work per week	9,324	.6473616	.4778169	0	1
Number of Middle Management Positions	9,324	3.630202	2.325975	1	21
Vice principals	9,324	.0790433	.2698208	0	1
Head of Department	9,324	.1461819	.3533074	0	1
Programme Leader	9,324	.019734	.1390923	0	1
Year group Leader	9,324	.5548048	.497014	0	1
Special Education Needs and Inclusion Coordinator	9,324	.0721793	.2587985	0	1
School Improvement Coordinator	9,324	.0899828	.2861725	0	1
School Self-Assessment Coordinator	9,324	.1357786	.3425717	0	1
Innovation and Project Management Coordinator	9,324	.0898756	.2860188	0	1

Table 4. Factors' loading and other goodness of fit for principal components

Factor	**Item**	**Factors' Loading**	**Alpha**	**AVE**	**CR**	**KMO**
Teacher Professional Development	G06D03_2	0.6635	0.90	0.45	0.90	0.92
	G06D03_3	0.7487				
	G06D03_4	0.7652				
	G06D03_5	0.7534				
	G06D03_6	0.6123				
	G06D03_7	0.5840				
	G06D03_9	0.6716				

	G06D03_10	0.8157				
	G06D03_11	0.7002				
	G06D03_12	0.7596				
	G06D03_13	0.7209				
Quality Assurance and Accountability	G06D01_1	0.6359	0.76	0.42	0.75	0.76
	G06D01_2	0.7185				
	G06D01_4	0.6151				
	G06D01_5	0.6028				
	G06D01_6	0.3563				
	G06D01_7	0.7636				
	G06D01_8	0.7493				
Learning and Curriculum Management	G06D02_2	0.8755	0.79	0.60	0.81	0.65
	G06D02_3	0.8999				
	G06D02_4	0.7569				
Teaching Innovation	G06D02_5	0.9167	0.80	0.73	0.84	0.60
	G06D02_6	0.9167				
Resourse Administration	G06D02_1	0.6457	0.85	0.43	0.85	0.86
	G06D04_1	0.7947				
	G06D04_2	0.7573				
	G06D04_3	0.7907				
	G06D04_4	0.7775				
	G06D04_6	0.6771				
	G06D04_7	0.6768				
	G06D04_8	0.5084				
Strategic Planning	G06D05_1	0.8380	0.91	0.61	0.91	0.91
	G06D05_2	0.8111				
	G06D05_3	0.8815				
	G06D05_4	0.8761				
	G06D05_5	0.8767				
	G06D05_6	0.7136				
	G06D05_7	0.6875				
Stakeholder Engagement	G06D06_4	0.8453	0.80	0.52	0.81	0.72
	G06D06_5	0.8422				
	G06D06_6	0.8550				
	G06D06_7	0.6223				
Reporting and External Communication	G06D06_1	0.8076	0.77	0.53	0.77	0.69
	G06D06_2	0.8347				
	G06D06_3	0.8466				
Student Management	G06D02_8	0.8654	0.78	0.57	0.80	0.66
	G06D02_9	0.8857				
	G06D01_3	0.7660				
Intrinsic Motivation	G02D02_5	0.8315	0.82	0.54	0.82	0.80
	G02D02_6	0.8151				
	G02D02_7	0.8093				
	G02D02_8	0.7833				
Supportive Leadership to the Principal	G07D04_1	0.7869	0.95	0.60	0.95	0.96

	G07D04_2	0.7570				
	G07D04_3	0.8187				
	G07D04_4	0.7895				
	G07D04_5	0.6838				
	G07D04_6	0.8378				
	G07D04_7	0.8441				
	G07D04_8	0.8523				
	G07D04_9	0.8251				
	G07D04_10	0.8238				
	G07D04_11	0.6892				
	G07D04_12	0.8029				
	G07D04_13	0.8078				
	G07D04_14	0.7878				
Material and Extrinsic Incentives	G03D05_5	0.7640	0.80	0.60	0.81	0.66
	G03D05_6	0.8970				
	G03D05_7	0.8772				
Intangible Extrinsic/Intrinsic Incentives (public appreciation)	G03D05_1	0.9266	0.83	0.75	0.85	0.60
	G03D05_2	0.9266				
Pedagogical In-Service Training	G05D01_2	0.6342	0.75	0.46	0.76	0.85
	G05D01_3	0.6887				
	G05D01_5	0.5968				
	G05D01_8	0.5379				
	G05D01_9	0.6721				
	G05D01_10	0.6445				
	G05D01_11	0.5113				
	G05D01_15	0.5434				
	G05D01_19	0.4204				
Management In-Service Training	G05D01_12	0.4930	0.71	0.45	0.75	0.79
	G05D01_13	0.7443				
	G05D01_14	0.7532				
	G05D01_15	0.7384				
	G05D01_16	0.5411				
	G05D01_17	0.7189				
Personal Satisfaction as a Teacher	G08D03_1	0.7565	0.79	0.45	0.80	0.78
	G08D03_2	0.8111				
	G08D03_3	0.6809				
	G08D03_5	0.7644				
	G08D03_11	0.7266				
Time and Effort Issues	G08D03_12	0.7062	0.80	0.53	0.81	0.78

	G08D03_13	0.8650				
	G08D03_14	0.8360				
	G08D03_15	0.7905				
Self-Efficacy as a Middle Leader (personal self efficacy)	G08D01_8	0.8694	0.77	0.54	0.78	0.66
	G08D01_9	0.8586				
	G08D01_10	0.7566				
Self-Efficacy as a Middle Leader (collective self efficacy)	G08D01_1	0.7052	0.83	0.44	0.84	0.83
	G08D01_2	0.6577				
	G08D01_3	0.7778				
	G08D01_4	0.7850				
	G08D01_5	0.8132				
	G08D01_6	0.6391				
	G08D01_7	0.6419				

Table 5. Correspondence between RQs, Models, and sources of MLs aspirations.

Sources of MLs' aspirations	**Research Questions**	**Five Sequential Logistic Models**
S1	R1	M4, M5
S2	R2	M2, M3, M4, M5
S3	R3	M5

Table 6 – Odds ratios for logistic regressive models

	Description	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**
ML's Experience	Secondary school teacher	0.551***	0.762**	0.790**	0.773**	0.771**
	University degree	13.73***	13.15***	13.58***	13.23***	13.18***
	Age	0.981***	0.980***	0.977***	0.977***	0.978***
	Gender	2.041***	2.025***	2.131***	2.283***	2.278***
	Length of service in the same school	1.006	0.994	0.984**	0.982***	0.982***
	Permanent or open-ended contract	4.507***	3.864***	3.573***	3.715***	3.719***
	Hours of contractual work per week	2.050**	1.806**	1.432	1.444	1.440
	Personal satisfaction as a teacher	0.902***	1.079	0.913*	0.920	0.903*
	Time and effort issues	0.918**	0.868***	0.824***	0.835***	0.837***
	Vice Principals		2.757***	1.818***	1.749***	1.743***
	Head of Department		0.865	0.930	0.796*	0.788*

Middle leadership Positions	Programme Leader		0.682	0.554*	0.391**	0.386**
	Year Group Leader		0.686***	0.818**	0.770***	0.770***
	Special Education Needs and Inclusion Coordinator		1.311**	1.066	0.904	0.908
	School Improvement Coordinator		1.487***	1.223	0.977	0.982
	School Self-Assessment Coordinator		2.006***	1.454***	1.123	1.130
	Innovation and Project Management Coordinator		2.416***	1.917***	1.475***	1.487***
Middle leadership Practices	Teacher Professional Development			1.070	0.965	0.958
	Quality assurance and accountability			1.174***	1.108*	1.104*
	Learning and Curriculum Management			0.891**	0.898*	0.897*
	Teaching Innovation			1.112**	1.033	1.034
	Resource Administration			1.003	0.970	0.969
	Strategic planning			1.476***	1.433***	1.417***
	Stakeholder Engagement			1.170**	1.150**	1.153**
	Reporting and External Communication			1.171***	1.058	1.052
	Students Management			0.918	0.940	0.936
Experiences, incentives and professional development	Number of middle management positions held				1.150***	1.151***
	Intrinsic Motivations				1.531***	1.477***
	Supportive Leadership of the Principal				0.726***	0.694***
	Extrinsic Incentives				1.157***	1.147**
	Pedagogical In-service Training				0.892**	0.894**
	Management In-service Training				1.474***	1.468***
Self-efficacy	Self-efficacy as a Middle Leader (personal self efficacy)					1.204**
	Self-efficacy as a Middle Leader (collective self efficacy)					0.953
N. (Chi2)		9180 (255.6)	9180 (548.2)	8994 (660.3)	8994 (777.1)	8994 (776.5)
Pseudo R^2		0.0660	0.126	0.172	0.225	0.226
AIC		4835.0	4541.7	4239.1	3984.4	3980.7
BIC		4906.2	4670.0	4431.0	4218.9	4229.4

Hosmer–Lemeshow	40.83	4856.3	4557.8	4254.5	3997.3

**Note: significant p-values are indicated in bold and with ***p < 0.001, **p < 0.01, *p < 0.05.*