

The Path From Induction To Job Satisfaction

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Abstract

This study delves into the dynamics of early-career primary school teachers' job satisfaction by examining the relationship between principal leadership, collegial support, and their perceived quality and frequency. The focus is on primary school level and based on a sample of 1071 teachers from French-speaking Belgium with less than 5 years of experience. We investigate how these factors contribute to the overall satisfaction of teachers' induction. Our research questions probe the association between the frequency and quality of support from colleagues and job satisfaction, as well as the extent of principal leadership's influence on both aspects of collegial support and their subsequent impact on job satisfaction. Our findings show that the latter is slightly more strongly predicted by the quality rather than the frequency of support from colleagues. Additionally, we discovered that principal leadership positively affects both the frequency and quality of support from colleagues. Finally, according to the analysis, we concluded that job satisfaction is positively influenced by both the frequency and quality of support from colleagues, as well as by the presence of strong principal leadership. These findings underscore the importance of supportive school environments during the induction process and effective leadership in fostering job satisfaction among early-career teachers.

Keywords: Beginning Teachers, Social Capital, Induction Process, Transformational Leadership, Collegial Support, Job Satisfaction

1. Introduction

In the past few decades, the shortage of school teachers has emerged as a matter of national significance (Craig et al, 2023). Education researchers and policymakers consistently emphasize the persistent challenge of severe teacher shortages in elementary and secondary schools. The occurrence of teacher shortages and the ensuing efforts to recruit teachers are familiar challenges in educational systems and the cyclic threat of teacher shortages has persisted for decades (Craig et al, 2023; Ingersoll, 2003; Weaver, 1983).

The teacher shortage is often discussed from two perspectives (Ingersoll & Smith, 2003). On the one hand, the teacher shortage is described as the consequence of the lack of attractiveness of the profession and the decline in the number of young people wishing to pursue a career in teaching. On the other hand, it is linked to the critical attrition rate among novice teachers. In this second perspective, the shortage is not primarily due to a lack of individuals entering the teaching profession, but rather a significant number leaving within a few years of starting. While both, the lack of attractiveness and the attrition rate, may contribute to the teacher shortage, it is now more commonly accepted that the attrition problem is the most significant (Craig et al, 2023; Ingersoll & Smith, 2003).

Researchers focus on teacher attrition as a significant aspect of the issue, especially notable among teachers within their initial years of service (Brok et al., 2017; Ingersoll, 2003). Taking the example of the US, data indicates that within a span of five years, a significant proportion of novice teachers, ranging between 40 and 50%, have exited the teaching profession entirely. Mainly, job dissatisfaction contributed to teacher attrition (Ingersoll, 2003). Similar results (30-40%) are observed in French-

speaking Belgium indicating the large amounts of teacher attrition in recent years (Dupriez et al, 2016).

How can we tackle this attrition rate problem? Research consensually highlights that the principal solution to the problem is increasing school support for novice teachers in order to facilitate their induction process (Ingersoll & Smith, 2003, Reeves et al., 2021).

As Wong (2005, p. 41) stated: "Induction is a comprehensive process of sustained training and support for new teachers." Effective induction programs should deliberately establish and explicitly communicate new professional norms and expectations. Newly hired teachers need assistance in assuming responsibility not just for the activities within their classrooms but also for the broader educational community to which they belong (Coppe et al, 2023).

Research has revealed that mentors, along with the new teacher's colleagues, play a pivotal role in the induction process and significantly influence the assimilation of new teachers. In addition to offering professional and emotional support, they play a crucial part in helping new teachers adapt to the school culture. The support provided by the principal and other colleagues, coupled with increased time spent in the school, enhances the mentor's overall contribution (Alhija & Fresko, 2010).

As additional evidence of the importance of collegial support, a recent study on teachers identified "discussions with colleagues" as both their most frequently utilized and most beneficial form of professional development (Csíkos et al., 2018). A systematic literature review on the induction of teachers characterized colleagues as "potent informal sources of support" (Ruitenburt & Tigchelaar 2021, pp. 11, 12). Fostering collegiality among beginning teachers could be a crucial factor in encouraging retention (Coppe, et al., 2023).

The importance of support from colleagues can be understood through the lens of the concept of “social capital”. The definition of social capital as given by Coppe, and colleagues (2023) stated that social capital is a relevant and rich concept for exploring the induction process of beginning teachers as a social process. More specifically, we consider social capital as a concept connected to social relations (Fang et al., 2011). Thus, social capital is connected with social collegial ties; new teachers establish both professional and personal connections with colleagues across the school, partly to seek assistance in addressing job-related problems and concerns (Coppe et al, 2023).

Interactions among teachers signify an individual form of social capital, serving as a valuable reservoir of advice, information, support, and learning. Alternatively, one might conceptualize a positive school climate (provided as principal leadership), characterized by favorable norms and trust, as a collective form of social capital, creating a conducive atmosphere for professional growth and collaboration (Coppe et al, 2022).

Indeed, the principal's leadership also plays a crucial role as a significant school factor to consider, concerning how novice teachers experience their induction process (Thomas et al, 2020). Transformational leaders possess key qualities, including charisma or inspirational motivation, which allows them to inspire and motivate employees (Paffen, 2011) by fostering commitment to shared goals (Bass, 1996; Griffith, 2004; Marks & Printy, 2003). As Thomas and colleagues stated: “The more first-year teachers perceive their principal to have transformational abilities, the more they are intrinsically motivated to teach, feel effectively committed to the school, and are satisfied with the job.” (2020, p. 120).

These two aspects (i.e., collegial support and principal leadership) have been shown to have a positive impact on job satisfaction, Thomas et al. (2019) defined job

satisfaction as a pleasurable or positive emotional state stemming from the assessment of one's job or job experiences. Job satisfaction is one of the main constructs used to assess how novice teachers experience their induction and in turn, if they are at risk of leaving the profession (Thomas et al, 2019).

It has become clear that teacher shortages are a global problem that can be prevented if the induction processes are achieved successfully, as induction helps to reduce the attrition rate of beginning teachers—which is one of the main causes of shortages. An effective route that can lead to it is support from colleagues and from the general school environment that gives assistance to teachers and keeps them in high job satisfaction levels.

In this study, we aim to examine the association of principal leadership with collegial support and subsequently draw conclusions about job satisfaction by exploring both the frequency and quality of support among novice primary teachers in Belgium.

If we delve deeper into the connection between collegial support and teachers' induction, we will observe that research indicates that the significance of support from colleagues extends beyond its quantity, encompassing its quality as well (Ingersoll, 2012; Wechsler et al., 2012). Notably, Thomas et al. (2019) discovered that specific collegial support, focusing on quality rather than quantity, was correlated with teachers' job satisfaction and motivation to teach (Reeves et al., 2021). The perceptions of novice teachers regarding their daily professional life might be influenced by the level of support they receive through the connections with colleagues across the school (Allen & Meyer 1990; Coburn & Russell 2008; Pogodzinski, 2014). More specifically, it seems that the volume of support and the

quality of it could play a crucial role in influencing teachers' job satisfaction (Siciliano, 2016).

The connection between principal leadership and collegial support is inseparable; results of prior educational research align with the idea that the principal plays a crucial role in fostering positive professional relationships among colleagues. This relation arises from the finding that the more the principal is perceived as a transformational leader, the greater the number of colleagues identified by first-year teachers as sources of professional support, and the more beneficial this support is perceived to be. The principal's role in encouraging positive professional connections among colleagues aligns with findings from previous educational studies on this subject (Griffith, 2004; Thomas et al, 2020).

2. This study

This study seeks to investigate the relation between principal leadership and collegial support and, in turn, job satisfaction. We aim to explore these relationships for both the frequency and quality of support among early-career primary school teachers in French-speaking Belgium.

RQ1: To what extent is there an association between principal leadership and job satisfaction and to what extent is this association mediated by both the frequency and quality of support from colleagues? (Direct, indirect effect)

RQ2: To what extent does the relationship between support from colleagues and job satisfaction differ between the quality and the frequency of the support?

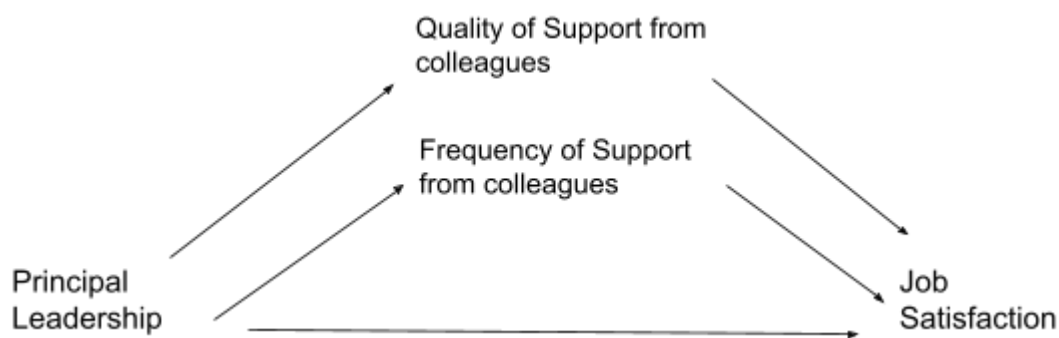
Hypotheses:

Principal leadership positively affects the frequency and quality of support from colleagues.

Job satisfaction is positively affected by the frequency and quality of support from colleagues which mediates the relationship between principal leadership and job satisfaction.

Job satisfaction is more predicted by the quality than the frequency of support from colleagues.

Analytical Model:



3. Methodology

3.1 Participants and data collection:

This study is part of a research project comparing the induction experiences of beginning teachers in Belgium and the Netherlands. Data was collected between January and March 2023, and a second round of data collection was conducted in January 2024 in the Netherlands only. Given the focus on beginning teachers, participants have 7 years or less of teaching experience.

An online questionnaire was used to collect data from participants. The first part contains questions about demographic information. The second part of the questionnaire includes questions about the support they receive from colleagues -both emotional and professional support-, and the last part of the questionnaire contains psychometric scales.

For the purpose of this thesis, we only used data from primary school teachers working in Belgium, with five years of experience or less, and the variables described below.

Our study included a sample of 1248 beginning primary school teachers from French-speaking Belgium. However, the number of observations -participants who responded to all the questions we used in this study- is 1071. Among the participants, 9.5% were men and 89.3% were women. In general, the years of teaching experience varied; 11.9% of the respondents had 1 year of experience, 12.9% had worked for 2 years, 15.2% of them 3 years and 13.1% had 4 and 5 years of experience in the profession.

3.2 Measures:

Support from colleagues. We focused on the frequency and quality of colleagues' interaction to evaluate the collegial support of novice teachers. We evaluated professional support by asking novice teachers "To whom do you turn to discuss about work? (up to 15 colleagues)" and assessed the frequency and quality with scales from 1 to 5 (once every three months to everyday; and not useful at all to very useful). We measured in the same way the emotional support they receive from colleagues. Professional and emotional support are combined in the overall measure of support from colleagues. The frequency score is the number of colleagues they reported having interactions with, weighted by the frequency of those interactions, and the same calculation is done for the quality score.

Transformational leadership. Based on Moolenaar et al. (2010) we used the transformational leadership scale, which refers to the degree to which a principal initiates and identifies a vision (and other dimensions, i.e. individualized consideration, and intellectual stimulation) for the school's future. This scale consists

of 18 items according to; Moolenaar et al. (2010); (e.g. “The principal of my school encourages teachers to experiment with new didactic strategies”) A Likert scale of agreement is used (ranging from 1: strongly disagree to 5: strongly agree). The variable has indicate good reliability in our sample as the Cronbach alpha is .964.

Job Satisfaction. We used four items from Quinn and Shepard's (1974) job satisfaction index to evaluate teachers' overall job satisfaction. Employees indicate to what extent they agree with each item on a 5-point Likert-type scale (1 = strongly disagree, 5= strongly agree). An example of the question in our questionnaire to define job satisfaction is “Knowing what I know now, if I had to make the decision to become a teacher again, I would”. Moreover, the variable indicates a high reliability score in our sample as Cronbach alpha is .878.

3.3 Analysis:

This study used a quantitative research design to investigate a mediation model exploring the direct and indirect effects of principal leadership on job satisfaction, with support from colleagues as a mediator -with a distinction between the frequency and the quality of the support- entered into two separate models. We examined the direct effect of principal leadership as the independent variable on job satisfaction. Also, the indirect effect of the independent variable principal leadership with the quality and frequency of support from colleagues as a mediator of the effect on the dependent variable, job satisfaction.

In order to run the analysis we used Jamovi software with the package “Path Analysis”. (The jamovi project, 2022)

4. Results

In the following section, the findings of each hypothesis are reported.

Tables 1 and 2 display the effect estimates with corresponding β values (i.e., standardized coefficients) and the p-values of the relationships between the variables.

The relationship between all variables was found to be significant in the model.

4.1 Hypothesis 1

Before the analysis, it was hypothesized that principal leadership positively affects colleagues' frequency and quality of support. The results showed that principal leadership's effect on the frequency of support from colleagues is positive and significant ($\beta = .172, p < .001$). This means that the more school principals act according to a transformational leadership style, the more teachers have supportive interactions with their colleagues.

Referring to the same hypothesis, the effect of principal leadership on the quality of support from colleagues is positive and significant ($\beta = .188, p < .001$), meaning that the more active the transformational leadership style is exhibited by the principal, the support among colleagues appears to be better in quality. The results of this analysis confirm the hypothesis mentioned.

4.2 Hypothesis 2

The second hypothesis indicates that job satisfaction is positively affected by the frequency and the quality of support from colleagues which mediates the relationship and -in turn-, affects the principal leadership.

The direct effect of principal leadership on job satisfaction is positive and significant ($\beta = .285, p < .001$). Subsequently, the more the principal behaves according to a transformational leadership style, the more satisfied with their job teachers are.

The results, also, show that the effect of the frequency of support on job satisfaction is positive and significant ($\beta = .111, p < .001$). This means that the

frequency of support from colleagues positively affects job satisfaction and it comes in line with the hypothesis. Therefore, the more frequent interactions teachers retain with colleagues, the more they are satisfied with their jobs.

Moreover, the hypothesis concerns the indirect relationship between Job satisfaction and principal leadership which is partially mediated by the frequency of support from colleagues, which is significant ($\beta = .019, p < .001$). Thus, the more the principal acts according to a transformational leadership style, the more regularly beginning teachers interact and, they are more satisfied with their job.

The same was hypothesized for the quality of support; the effect of quality of support on job satisfaction is positive and significant ($\beta = .127, p < .001$) which shows that teachers' job satisfaction is correlated with the quality of support they receive from colleagues.

Furthermore, the effect of principal leadership on job satisfaction is partially mediated by the quality of support which is positive and significant ($\beta = .024, p < .001$), this means that the more the principal acts according to a leadership approach, the more quality support the colleagues acquire and thus they are more satisfied with their job. Consequently, the hypothesis aligns with the results.

4.3 Hypothesis 3

The last hypothesis assumes that job satisfaction is more predicted by the quality than the frequency of support from colleagues. Our results show that the quality of the support from colleagues affects slightly more job satisfaction, contrary to the frequency of support ($\beta = .127 > \beta = .111$). This means that when teachers support their colleagues more substantially, they are more satisfied with their job rather than when the support they receive is more frequent. Yet, the distinction is only slight and both seem to be important in improving job satisfaction of beginning teachers.

Table 1*Results for the model with frequency of support*

Relation	<i>b</i>	<i>SE</i>	β	<i>p</i>
Principal Leadership -> Job satisfaction	0.3101	0.03392	0.285	<.001
Frequency of support -> Job satisfaction	0.0128	0.00317	0.111	<.001
Principal Leadership -> Frequency of support	1.6270	0.30343	0.172	<.001
Principal Leadership \Rightarrow Frequency of support \Rightarrow Job satisfaction	0.021	0.006	0.019	.001

Table 2*Results for the model with quality of support*

Relation	<i>b</i>	<i>SE</i>	β	<i>p</i>
Principal Leadership -> Job satisfaction	0.3036	0.03381	0.279	< .001
Quality of support -> Job satisfaction	0.0121	0.00262	0.127	< .001
Principal Leadership -> Quality of support	2.1519	0.35716	0.188	< .001
Principal Leadership \Rightarrow Quality of support \Rightarrow Job satisfaction	0.026	0.007	0.024	< .001

In answering our research questions we observe that -indeed- there is a relationship between principal leadership and job satisfaction and the association is partially mediated by both the frequency and quality of support from colleagues (RQ1).

The quality of the support from colleagues affects job satisfaction slightly more than the frequency of support (RQ2).

5. Discussion

This study seeks to investigate the insights on how to tackle teacher shortages, through the induction process of new teachers and the ways it affects their job satisfaction. The research questions examine how the principal leadership influences the level of support -in

terms of frequency and quality- among colleagues, and in turn, how this affects the job satisfaction of novice primary school teachers in French-speaking Belgium. While previous studies have hinted at the positive relationship between principal leadership and collegial support, our research adds depth by specifically examining how principal leadership impacts the frequency and quality of support among colleagues. By focusing on the primary school level, our study underlying job satisfaction among early-career educators.

According to the results which refer to the relationship between principal leadership and the frequency and quality of support from colleagues and the effect on job satisfaction, the findings reveal that there is a positive association between the variables -coming in line with our first hypothesis-; the principal's leadership style positively affects the quality and frequency colleagues are receiving. Alhija and Fresko (2010) have found a similar outcome regarding the association between principal leadership and support from colleagues and their effect on job satisfaction. They use the variables support from the principal and support from colleagues who operate similarly to those in our study. They also mention that these two variables as well as more time spent in school are some of the main factors affecting job satisfaction. This makes us conclude that when a principal follows a leadership style and seems to be involved with the teachers, a supportive community is created in which teachers help each other, exchanging ideas and experiences to improve the well-being of their working environment. According to the findings mentioned an implication for future research could be the use of the time teachers spend in school as an extra predictor that will determine the effect of the rest of the variables; for instance, when a teacher is working many hours at the same school, has more

opportunities for socialization and bonding with colleagues rather than a teacher that works limited hours and don't interact with others (Alhija & Fresko, 2010).

A different point of view is given by Hewett and La Paro (2020), who describe collegiality and supervisor's leadership showing that both influence the climate of the school and teachers' job satisfaction, however, they didn't find an association between these two. A reason for that could be the limitation they provide about the variation of individual's perception of leadership or other school factors that influence the relationship as well. Contextual factors such as school culture or regional differences may play a role in shaping the relationship between the leader and teacher support networks. An additional cause could be the existence of many teachers' training programs that have made the educators aware and trained and consequently, not in need of the principal leadership's aid. An implication could be that future studies focus on the content and quantity of the specific teachers' training programs that exist at the particular period and region to clarify their effects on teachers.

Another finding that relates to the second hypothesis is about principal leadership, which seems to positively affect the frequency and quality of support from colleagues, mediating the relationship and affecting job satisfaction. This relation complies with Thomas et al. (2020) using the same variables to describe the direct and indirect correlation adding the self-efficacy of teachers as a predictor in the relation. Consequently, the use of a leadership style by the principal not only leads colleagues to a supportive environment for each other but also helps them remain resilient and satisfied in their jobs, which as a result aims to their retention in the school. In a similar direction, Reeves et al.

(2022) mention the distinction between frequency (referred as quantity) and quality of support, pointing out their importance and significance.

However, Reeves et al. (2022) state that their study is unable to specify if the quantity or quality of support from colleagues is more efficient. This points to our finding related to the third and last hypothesis about the comparison between the frequency and quality of support from colleagues; we hypothesized that job satisfaction is more affected by the quality than the frequency of the support. Although Reeves et al. (2022) couldn't predict this relationship, our results reveal that –indeed- there is a difference, however, the influence of quality support on job satisfaction is only slightly more than the frequency. A justification can be the simultaneous existence of both; when the support is more regular the quality of it might be reduced. An implication of this cause, as also Pogodzinski (2014) marks, is that future researchers should expand their data collection in order to measure more broadly the difference between frequency and quality of support.

Our findings carry practical implications for educational stakeholders. School administrators may consider the role of leadership styles in fostering supportive environments that promote teacher collaboration and well-being. Professional development programs could prioritize training in effective leadership strategies to cultivate a culture of collegiality and enhance job satisfaction among educators. By prioritizing the quality and frequency of teacher support, schools can strive towards creating sustainable, fulfilling work environments conducive to orderly induction and teacher retention.

A potential limitation of the study is the quantitative method that we followed. The use of quantitative procedures in data collection can entail the difficulty of not realizing what caused each result and effect of the study. More specifically, the results are not explained

further by the participants as they didn't have the opportunity to elaborate more about their experiences. This would have been achieved if we were using interviews or another qualitative method for data collection which would allow for an in-depth exploration of individual perspectives. This type of data collection addresses answers to "how and why" questions in the study, focusing primarily on feelings, perceptions, and emotions and would have provided different aspects of our results (Taherdoost, 2021).

Another barrier that should be taken into account is the combination of the variable support from colleagues that was used without a distinction between emotional and professional support, subsequently, the results are not that specific and contain the mean of the two variables which -however- was separated on the frequency and quality of support. Professional and emotional support as distinctive variables can lead to different effects and affect various aspects of colleagues' interactions (Sikma, 2019). A more extended distinction would be interesting for future research and could give more explanation about the effects on the induction process.

An additional boundary is that the study does not establish causation; at the cross-sectional design chosen, we are not using causality and as a result, we are focusing on the current association of the variables instead of their effects, as we can't examine them over time. A suggestion for such a limitation is the use of longitudinal data which will help us understand the directionality of the effects and create clearer results with causal relationships.

Moreover, the results might be biased by the personal point of view of each participant and may have been influenced by subjective interpretations of survey items, particularly regarding the assessment of support quality and frequency. More specifically, some participants might consider the quality of communication differently than others. A future

study could use more distinct measures for these variables to create more objective results and enhance the validity and reliability of future studies. Such instruments could be daily journals for the participants to keep track of each collegial interaction they experience during their day, describing its content and duration.

An additional possible restriction is the sample used; while our study focuses on French-speaking Belgian primary school teachers, the findings may not be generalizable to educators in different cultural or educational contexts. To enhance the external validity of future research, broader sampling strategies could be employed to encompass diverse teacher populations across multiple countries and academic levels. This would lead to specific results that can be broadened or generalized for all the teachers or other countries.

Finally, the use of transformational leadership as a measure for the variable of principal leadership reveals results only for a specific leadership style that could be used differently by each principal. An implication for future research is to examine varied leadership styles and compare their effects on collegial support and the other variables used.

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