

**The relationship between principal leadership and professional support on beginning
teachers' intention to quit**

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Abstract

The issue of teacher shortages is a pressing concern worldwide. Policymakers are mainly responding to the teacher shortage by focusing on the recruitment of new teachers. Research shows that teacher attrition plays a major role in increasing the teacher shortage. This is especially the case for beginning teachers. In the current academic discourse it is therefore argued that there is a need to take measures to retain beginning teachers in education. Research shows that factors including principal leadership and professional support have a positive impact on teacher retention. This study examines the relationship between these factors and beginning teachers' intention to quit. The study focuses on beginning teachers in Dutch primary education with up to five years of teaching experience (N=111). The study is focused on Dutch beginning teachers due to the high rates of teacher attrition. By performing a mediation analysis in the statistical program Jamovi, relationships between variables were examined. The analysis conducted showed that there is a negative relationship between professional support and the intention to quit of the beginning teacher. The results show that there is a positive relationship between principal leadership and professional support. Despite theoretical support, no relationship was found between principal leadership and the intention to quit, mediated by professional support. Limitations and implications of the study are discussed.

Keywords: teacher shortage, teacher retention, beginning teacher, principal leadership, professional support, intention to quit

1. Introduction

In Europe as well as the United States, the teacher shortage is visible within both primary and secondary education (Federicová, 2020). About 30% of pupils attend schools where the capacity to teach is hampered by insufficient teaching staff (OECD, 2016). It is essential to take action against the teacher shortage, as teachers play a crucial role in enabling education in society (Kelchtermans, 2017). Research has shown that policymakers mainly respond to the teacher shortage by providing more new teachers (Meijer, 2021; Ingersoll & Smith, 2003). The various ways policymakers are attracting new staff to tackle the teacher shortage are worthwhile, according to Ingersoll and Smith (2003), but will not solve the teacher shortage (Ingersoll & Smith, 2003; Lindqvist et al., 2014). These researchers argue that attrition among existing teachers is a larger part of the problem. It is notable that this is particularly the case among beginning teachers. According to the findings of several researchers, the policy focus on recruiting new teachers will not solve the staffing shortage in schools (Darling-Hammond et al., 2018; Ingersoll & Smith, 2003). The solution must include teacher retention (Darling-Hammond et al., 2018). Therefore, to address the teacher shortage, policies should include strategies for retaining beginning teachers.

To retain beginning teachers, researchers and policymakers have focused on induction programs, defined as structured and often formalized arrangements designed to assist and support beginning teachers in becoming competent and effective professionals (Helms-Lorenz et al., 2016). Ingersoll (2012) found that there is consensus on the positive effect of induction programmes. Activities within the induction program may include workshops, lessons and regular meetings with other beginning teachers. Workload reduction, the assignment of a mentor, observations in a beginning teacher's classroom also appear as components of induction programs (Helms-Lorenz et al., 2016; Wechsler et al., 2012). Elements of induction programs that are more effective in facilitating teacher retention include having a mentor and working with peers, according to Ingersoll (2012), which has sparked researchers' interest in informal dynamics that facilitate teacher induction (März & Kelchtermans, 2020).

Indeed, besides formal activities that offer induction programs to retain teachers, it appears that the school's organizational context is critical to the development and retention of beginning teachers (Wechsler et al., 2008). The findings of Wechsler et al. (2012) tell us that a combination of strong school leadership, professional relationships among colleagues, and a positive and supportive climate among all colleagues positively influences retention of beginning teachers. According to Snoek et al. (2010), providing professional support is an important component for the retention of beginning teachers. More generally, recent research on teacher induction consistently reports that interactions with peers, as a form of social capital, is of extra-importance for supporting beginning teachers' retention (Coppe et al., 2023; Thomas et al., 2019). Research has also shown that the leadership style of the principal has a significant impact on the availability of support from colleagues for beginning teachers (Thomas et al., 2020).

By examining the relationship between professional support and principal leadership on the intention of the beginning teacher to quit, this study aims to provide information which should help design governmental or school-level policies in order to promote effective leadership practices and foster a supportive teaching environment. This research is conducted in the context of primary school teachers in The Netherlands given the high attrition rate of beginning teachers in particular (Dekker et al., 2021).

2. Theoretical Framework

This section takes a closer look at the causes and consequences of the teacher shortage and how teacher retention can play a role in this. Social capital is discussed as this overarching concept is measured by professional support. Lastly, the relationships of principal leadership with professional support and beginning teacher intention to quit are discussed.

2.1. Teacher shortage and teacher retention

Beginning teachers who left the teaching field within a few years cite a range of factors as reasons why they left the teaching profession. The causes of attrition can vary greatly from country to

country, influenced by local cultural, economic, and educational contexts (Den Brok et al., 2017). According to Den Brok and colleagues, reasons for leaving the teaching profession within a few years include low salary, weak school organization, lack of autonomy and decision-making opportunities, burnout, lack of collegiality and support, working conditions, lack of teaching resources, high workload, and poor relationships with colleagues and leadership. The same study showed that the causes for teacher attrition in the Netherlands are similar to those in other countries. These causes are mostly related to job characteristics and the local school context. Personal reasons also play a role, and often a combination of factors leads to teacher attrition rather than a single problem.

The lack of qualified teachers has significant consequences as it undermines students' learning experiences due to a lack of adequately qualified teachers (Garcia & Weiss, 2019). High teacher attrition leads to instability in schools, which negatively impacts student achievement and reduces overall teacher effectiveness and quality. This shortage also impedes efforts to improve the reputation of the teaching profession and further professionalize it, perpetuating the cycle of shortages. These consequences underscore the importance of retaining beginning teachers.

Several studies have highlighted the vital role of formal induction programs and mentoring in helping beginning teachers overcome initial challenges and stay in the profession. While this formal support is well-intended and relevant, the focus on structured help has often diverted researchers' attention from the informal, collegial interactions that have a considerable impact on how beginning teachers experience their induction phase (März & Kelchtermans, 2020). Research by Mansfield and Gu (2019) shows that informal professional support from colleagues had more impact in the induction phase on beginning teachers than the formal induction programs offered by the Department of Education and schools, emphasizing the importance of informal induction components.

2.2. Social capital as professional support

Social capital theory can be used as a fine-grained theoretical lens for understanding how interactions with colleagues act as a form of informal support that facilitate the beginning teacher

induction process (Coppe et al., 2023). Since social capital cannot be captured in a single measurable variable, it is expressed in this study in terms of professional support. This study refers to individual social capital because it addresses teachers who receive professional support from colleagues, which provides a benefit to the beginning teacher. Coppe et al. (2022), in fact, say that individual social capital is the benefit a person acquires as a function of his social position in the social fabric of the school. According to Penuel et al. this benefit can be seen as “the resources and expertise that individuals can access through their ties that facilitate certain actions” (2009, p. 129). Peer teachers can therefore be considered powerful informal sources of support (Ruitenburg & Tigchelaar, 2021). In the context of the school, this can be seen through, for example, interaction among colleagues to exchange knowledge. When this exchange of information involves profession-related knowledge (i.e., a form of practical knowledge), which is very useful for beginning teachers, it is considered as professional support (Snoek et al., 2010; Symeonidis et al., 2023). The aforementioned authors additionally write that professional support involves supporting teachers in fostering their professional growth and acquiring essential skills and competencies.

Thomas et al. (2019) tell us that multiple studies show that professional support from colleagues is positively related to beginning teachers' job attitudes and then also has a positive effect on the retention of beginning teachers in teaching. Thus, from the literature we can conclude that professional support plays an essential role in retaining beginning teachers. The findings of Penuel et al. (2009) furthermore tell us that a teacher's social capital depends on the organizational context, such as leadership from the principal. Thomas et al. (2019) also underline that the role of the school principal is relevant to connectedness among teachers.

2.3. Principal leadership

Within this study, principal leadership is another one of these factors highlighted, in order to explain the relationship between principal leadership, professional support and teachers' intention to quit. A school principal can exhibit different types of leadership styles, including instructional

leadership, distributive leadership and transformational leadership (Cansoy, 2018). In his systematic review, Cansoy refers to multiple studies that show that the behavior and type of leadership exhibited by the school principal have a significant relationship with job satisfaction and that transformational leadership in particular has been found to have a positive impact on job satisfaction.

Transformational leadership includes components such as individualised support, shared goals, vision, intellectual stimulation, culture building, rewards, high expectations, and modeling (Thomas et al., 2020). These components indicate that a transformational school principal is able to provide teachers with support and autonomy according to Thomas et al. (2020). Moolenaar et al. (2010) add that when principals are closely connected to teachers, they can exert control over the dissemination of professional information, knowledge and work-related advice among the team. According to a study by Minckler (2014), transformational leadership not only affects intention to quit but affects teacher social capital in such a way that it thrives. Cansoy (2018) argues that when the more the school principal acts according to a transformational leadership style, the higher the teachers' job satisfaction. Madigan and Kim's (2021) meta-analysis shows that there is a relationship between teachers' job satisfaction and teacher intention to quit. Based on these findings, it can be argued that the more the principal acts according to a transformational leadership style, the higher the experienced professional support among colleagues and the lower the beginning teacher's intention to quit.

2.4. This study

This study aims to explore the relationships between principal leadership, professional support among colleagues, and the intention of beginning teachers to quit their profession. By examining these dynamics, the research seeks to uncover the relationship between the leadership of school principals and the support system within the teaching staff and subsequently mediate intention to quit of beginning teachers. The following hypotheses have been formulated to guide this investigation:

1. What is the relationship between principal leadership and teachers' intention to quit, and is this relationship mediated by professional support?

Drawing on the literature described in the theoretical framework, the following hypotheses were formulated.

- Hypothesis 1 states that there is a positive relationship between the leadership of the school principal and the professional support among colleagues.
- Hypothesis 2 states that professional support among colleagues is negatively related with the intention of beginning teachers to quit their profession.
- Hypothesis 3 states that principal leadership has a direct negative relationship on the intention of beginning teachers to quit.
- Hypothesis 4 states that principal leadership has an indirect negative relationship, via professional support among colleagues, on the intention of beginning teachers to quit.

3. Methods

3.1. Procedure and participants

This study is part of a research project investigating beginning teacher induction experiences. A part of the data was collected in 2022-2023 via an online questionnaire to beginning teachers in Belgium and the Netherlands working either in primary and secondary education. A new round of data collection was applied in January and February 2024. Data from Dutch elementary school teachers with up to five years of experience are used in this study. The data file, after the applied data collection earlier this year, includes 111 respondents with a mean of seniority of 2.60 ($SD = 1.48$) years.

3.2. Measures

3.2.1. Professional support

Following the procedure as described in Thomas et al. (2019), one question with two sub-questions is used to measure the professional support experienced by beginning teachers. The main question is “List the colleagues from whom you receive professional support”. The sub-questions are asked as follows for each listed colleague: “How often do you have these professional interactions with

[colleague]?” and “How useful do you find these professional interactions with [colleague]?”. For the first sub-question, there are five response options: Once every three to four months, once a month, once a week, several times a week, and every day. The second sub-question can be answered using a five-point scale: Never helpful, rarely useful, sometimes useful, often useful, always helpful. Each listed colleague represents a score of 1 that is weighted by the frequency and the quality of the support. More specifically, the formula used to compute the professional support with consideration of frequency and quality is as follow:

$$\text{Professional support} = \sqrt[2]{\sum_{i=1}^n [(Pro_Freq_i)(Pro_Qual_i)]}$$

With i the list of reported interactions (alter) for one participant, Pro_freq the frequency of professional support experienced and Pro_Qual the assessed quality of professional support.

3.2.2. Intention to quit

To measure intention to quit, the questionnaire asks beginning teachers to indicate the extent to which they agree with statements as: "I am thinking of leaving the teaching profession" and "I plan to quit teaching". Teachers were then able to indicate the extent to which they agree with these statements based on a five-point scale: strongly disagree, partially disagree, neutral, partially agree, strongly agree. The Cronbach's alpha is found to be excellent (three items, $\alpha = .912$).

3.2.3. Principal leadership

To measure principal leadership, eighteen items are used in the questionnaire. Two examples of statements that teachers answer within the questionnaire are: “My principal makes explicit reference to school goals when there are decisions to be made” and “My principal explains the relationship between the school's objectives and the projects implemented.” The questions are answered using a five-point scale where respondents can indicate the extent to which they perceive the statement. The five-point scale consists of strongly disagree, partially disagree, neutral, partially

agree, strongly agree. The Cronbach's Alpha for the items of Principal Leadership are found to be excellent (eighteen items, $\alpha = .953$).

3.2.4. Analysis

All hypotheses were tested using a single analysis: a mediation model conducted within the Path Analysis package (Epskamp et al., 2019) in the Jamovi statistical software program (Version 2.3.38; the jamovi project, 2024). This mediation model examined multiple paths to investigate the relationships between variables outlined in the hypotheses. Specifically, the analysis explored the direct relationships between professional support and intention to quit (H1), principal leadership and professional support (H2), and principal leadership on intention to quit (H3). Additionally, the fourth hypothesis investigated the mediating pathway from principal leadership to intention to quit, mediated by professional support (H4).

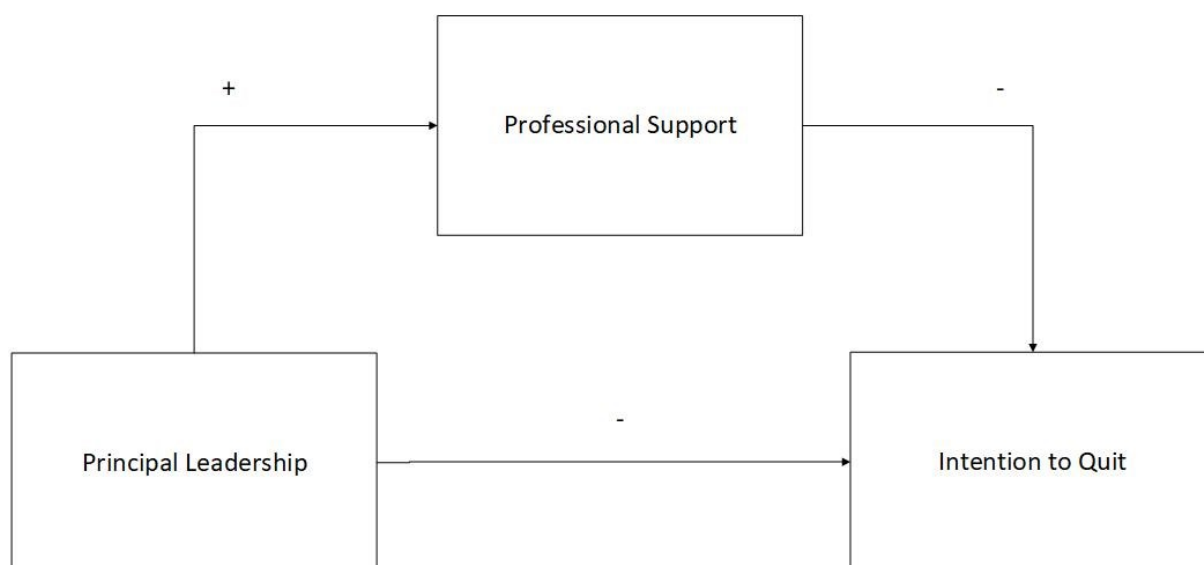


Figure 1 Hypothesized model

The hypothesised relationship of principal leadership on intention to quit, mediated by professional support.

3.2.5. Research ethics

All respondents gave their consent to sharing the data for research purposes upon completion of the questionnaire. The data was treated anonymously. The ethics committee from the faculty of Behavioural and Social Sciences approved the research project.

4. Results

This section describes the results of the path analysis performed. First, the results of the first three hypotheses, are described. Lastly, the results of the mediation path are described. Table 1 shows all paths with the corresponding standard error, beta coefficient and p-value.

Based on the analysis performed, the relationship between principal leadership and professional support is found to be positive and significant ($\beta = .339, p = .001$). This implies that the more the principal acts according to a transformational leadership style, the more the professional support among colleagues is experienced to be of higher quality. With this significant value, the first hypothesis can be supported. Table 1 shows that the relationship between professional support and intention to quit is found to be negative and statistically significant ($\beta = -.187, p = .021$). This result can be interpreted as a negative and significant relationship, indicating that as teachers receive more professional support from colleagues, the intention of the beginning teacher to quit becomes smaller. This aligns with the second hypothesis. For the third hypothesis, the direct relationship between principal leadership and intention to quit is found to be negative and statistically significant ($\beta = -.317, p = <0.001$). This implies that the more the principal acts according to a transformational leadership style, the less likely beginning teachers are to intend to quit. This is in line with the third hypothesis.

For the fourth hypothesis, a mediated path was conducted to explore the outcome of principal leadership on intention to quit, mediated by professional support. The results show that the relationship of this is negative and statistically not significant ($\beta = -.063, p = .051$). Although the relationship cannot be named significant, it is very close to being significant. This is not consistent with

the hypothesis, where it was mentioned that a significant relationship was expected. Although the relationship found was not statistically significant, the p-value being close to the critical 0.050 threshold, indicates that the possibility of a relationship existing cannot be completely excluded.

Table 1

Statistical Results of the Mediation Analysis

Path	SE	β	p
Principal Leadership → Professional Support	.258	.339	.001**
Professional Support → Intention to Quit	.035	-.187	.021*
Principal Leadership → Intention to Quit	.133	-.317	<0.001***
Principal Leadership → Professional Support → Intention to Quit	.044	-.063	.051

Note: β is reported as standardized beta coefficients.

***p < 0.001, **p < 0.01, *p < 0.05.

5. Discussion

The purpose of this study was to examine the relationship of principal leadership on teachers' intention to quit their jobs. Specifically, this study focused on exploring the role of professional support as a mediating factor in this relationship. The research question was: "What is the relationship between principal leadership and teachers' intention to quit, and is this relationship mediated by professional

support?" The corresponding hypothesis was that strong principal leadership, via increased professional support, would lead to a lower intention to quit among teachers. The hypotheses for the direct relationships were that strong principal leadership is directly related to both a lower intention of teachers to quit and a higher level of professional support, and that a higher level of professional support is directly related to a lower intention of teachers to quit. This section discusses the study's findings and limitations, followed by implications for practice and suggestions for future research.

The fact that principal leadership shows a positive relationship with professional support and a negative relationship with the intention to quit emphasizes the importance of transformational leadership. This is in line with the findings of Thomas et al. (2020) who found that principal leadership, and in this case transformational leadership, exerts significant positive influences on professional support among colleagues. The positive influence of principal leadership on intention to quit is further highlighted by the findings of Cansoy (2018) where a relationship was found between the adoption of a transformational leadership style by the school principal and the lower intention to quit for beginning teachers. Thomas et al. (2020) in their study found that professional support shows a positive relationship with teachers' job attitudes, which is in line with the findings of this study. This finding, according to the researchers, can be considered an important factor related to how teachers view their profession and what may play an important role in preventing attrition of beginning teachers.

The relationship between professional support and the intention to quit aligns with the literature, as illustrated by the findings of Alhija and Fresko (2010) who concluded that professional support from colleagues contributes to job satisfaction. From the findings of Madigan & Kim (2021), we know that higher job satisfaction is related to a lower intention to quit, allowing us to argue that the findings of Alhija and Fresko align with the relationship between professional support and intention to quit found in this study. Snoek et al. (2010) underline the importance of professional support among colleagues by including it in the guidelines of the European Commission's Handbook for education policymakers. The relationship found between professional support and intention to quit also aligns with those of Thomas et al. (2019) who found that when beginning teachers receive professional

support from various colleagues for a variety of issues, it contributes lowering the intention to leave the profession.

Interestingly, contrary to what Thomas et al. (2020) and Wechsler et al. (2012) suggest, the relationship between principal leadership, through professional support on the intention to quit is not significant. As found by Thomas et al. (2020), there is a positive relationship between transformational leadership and professional support. Adding to this, due to the indirect effects of transformational leadership on professional support, an enhanced job attitude among teachers was found. This increased job attitude, according to Thomas et al. (2020), plays an important role in how teachers view their profession, which is an important factor in reducing teacher attrition. Wechsler et al. (2012) found that a combination of strong school leadership with professional collegial support and a positive and supportive climate has a positive relationship with teacher retention, suggesting that there is a relationship between principal leadership and intention to quit, mediated by professional support. It is important to reiterate that this relationship just barely cannot be named significant is possibly due to limitations that is discussed in the limitation section.

5.1. Limitations

Although the analysis revealed a significant association between principal leadership and professional support, principal leadership and intention to quit, and professional support and intention to quit, it is important to note that these findings do not indicate a causal relationship between the variables. This study includes a cross-sectional design which means that only a snapshot was taken and no causal relationships between variables can be identified. Had a longitudinal design been used, it would have helped to track changes in variables over time which would help determine the direction of relationships. Although a sample size of 111 respondents can provide valuable insights, it may not be fully representative of the larger population. Future research with larger and more diverse samples could help to validate these results and provide a more comprehensive understanding. Another possible limitation is that the sample did not distinguish between beginning teachers working part-

time or full-time. It may seem plausible that teachers who work full-time gain more experience than part-time beginning teachers which means that over a five-year period they need less professional support among colleagues and depend less on the leadership of the school principal. At the same time, the distinction between beginning teachers working part-time or full-time presents an opportunity for further research.

Finally, no distinction was made between teacher's level of education, which is another possible limitation. Beginning teachers in Dutch elementary education may have had different training, namely the standard teacher training program or the academic teacher training program. Research shows that the growth curve of regular teachers differs from academic teachers (Doolaard et al., 2018). It appears that there is a difference in development in terms of teaching experience between these two groups, where academic teachers show faster growth than regular teachers. Again, follow-up research may clarify differences in the induction period between the educational background of the beginning teacher.

5.2. Implications

The findings of this study underline the importance of transformational leadership, therefore, it is recommended that training programs for school principals consider the importance of characteristics of transformational leadership in their curriculum. School associations¹ could pay attention to the importance of transformational leadership by including it in their strategic policy plan that is mandatory for school boards (*Wet op het Primair Onderwijs*, 2010, Artikel 17c, lid 1a). These school organizations can shape their policies by offering workshops on transformational leadership during the board meeting, where all school principals affiliated with the school association are present.

To foster professional support by colleagues, school principals can create informal moments at school. To stimulate or inhibit the flow of information and knowledge within schools, it helps that the principal's network position is closely aligned with teachers. (Moolenaar et al., 2010). For example, a principal could organize daily moments where the school team takes a break together, such as before

classes begin or immediately after school. As another example, the school principal could express the expectation that teachers take a break in the staff room when pupils are playing outside, rather than teachers staying in their classrooms to review or prepare lessons. By showing exemplary behavior, the school principal can also foster professional support among colleagues. A principal can do this by regularly checking with teachers about how things are going in their classrooms, offering help if necessary and sharing his findings with other teachers. Besides fostering the direct relationship between principal and teacher, this exemplary behavior should also cause colleagues to give each other more professional support.

¹ An organization that forms the governing body of one or more primary schools

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