

**The influence of informal support on job satisfaction and in turn retention of beginning
Dutch and Belgian primary and secondary school teachers**

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Abstract

Deze studie onderzocht de relatie van informele ondersteuning op de intentie om te stoppen, met werktevredenheid als mediërende factor, en maakte onderscheid tussen beginnende leraren in het basis- en voortgezet onderwijs. Doelstellingen waren (1) inzicht verschaffen in het belang van informele ondersteuning op werktevredenheid en de intentie om te stoppen, en (2) dit effect vergelijken tussen leraren in het basis- en voortgezet onderwijs. Een mediatiemodel werd gebruikt voor de analyse. De deelnemers ($n = 1779$) waren beginnende leraren in Franstalig België en Nederland. De bevindingen suggereren een gedeeltelijk gemedieerd effect van informele ondersteuning op de intentie om te stoppen door werktevredenheid. Over het algemeen betekent dit dat beginnende leraren meer tevreden zijn met hun baan en minder geneigd zijn te stoppen wanneer ze meer informele ondersteuning krijgen. Uit de differentiatie tussen leraren in het basisonderwijs en leraren in het voortgezet onderwijs is gebleken dat voor leraren in het basisonderwijs er een gedeeltelijk gemedieerd effect plaat vindt, terwijl er bij leraren in het voortgezet onderwijs alleen een direct effect gevonden is. Voor leraren in het basisonderwijs betekent dit dat wanneer ze meer informele ondersteuning krijgen, ze meer tevreden zijn over hun baan en minder geneigd zijn om te stoppen.

Sleutelwoorden: informele steun, werktevredenheid, leerkrachtentekort, leerkrachtafname, beginnende leerkrachten, primair onderwijs, voortgezet onderwijs, Nederland, België.

The influence of informal support on job satisfaction and in turn retention of beginning primary and secondary school teachers

These last few decades research have shown that the teacher shortages are a growing worldwide problem (e. g. Murphy et al., 2003; Sutcher et al., 2019). In the United States, for example, the demand for teachers in elementary and secondary schools due to teachers leaving the profession, is greater than the influx of new teachers (Sutcher et al., 2019). In Europe, the European Commission published a report in which they concluded that there is a strong need for qualified teachers (European Commission [EC], 2012). Additionally, in 2022 the Education Ministry of Australia agreed to address the national teacher shortage by setting out an ‘National Teacher Workforce Action Plan’ (Australian Government, 2022).

According to a review of Sutcher et al. (2019), high teacher attrition rates are the most crucial factor of teacher shortages. Recent insights suggest that, especially beginning teachers leaving the profession, might play a big part in the teacher shortage (Brok & Tartwijk, 2017; Smith & Ingersoll, 2004). In 2003 the percentage of teachers leaving the profession in the United States (US) during the first few years were 30% to 50% (Ingersoll, 2003). Van der Grift & Helms-Lorenz (2013) estimated the attrition rate for certified early career teachers in the Netherlands is 22% in the first three years of teaching. Additionally, the Ministry of Education expects primary education would be short on 11 thousand teachers by 2027 (Centraal Bureau voor de Statistiek [CBR], 2020). In a large study, Singer (1992) found secondary school teachers left on average 1.6 years earlier than teachers in elementary school (i.e. primary schools).

To prevent beginning teachers from leaving the profession, induction programs might help (Holloway, 2001; Sutcher et al., 2019; Wilson et al., 2001). Often referred to as formal support induction programs, encompass less heavy workload, financial support or provision

of a mentor and are found to impact teacher retention (McCreight, 2000; Sutchter et al., 2019; Worth et al., 2022). While these factors are found to matter to retention, they are typically found to be less important than the informal support beginning teachers receive, since the informal network structure as well as the access to informal resources changes over a school year (März & Kelchtermans, 2019; Sutchter et al., 2019). Informal support, being professional support as work-related ties and emotional support, is found to have a positive influence on teacher job satisfaction (Thomas et al., 2018), are valuable to keep teachers in the teaching profession (Smith & Ingersoll, 2004; Struyve et al., 2016) and are found valuable for the beginning teachers' experience of the induction (Baker-Doyle, 2010). Job satisfaction, known as the emotional reactions of a person towards their job (Coetzee et al., 2010), is a known and key factor influencing retention decisions of beginning teachers (Chapman, 1983; Stockard & Lehman, 2004).

While previous studies in the Netherlands have primarily been focused on the effect of formal induction programs on teacher retention (Helms-Lorenz et al., 2013), little research has been done on the relationship of informal support and the experiences of beginning teachers relating to their profession. The first objective of this study is to provide insight into the importance of informal support on job satisfaction and in turn on intention to quit. The first question addressed will be:

- Question 1 : To what extent does informal support influence job satisfaction and in turn retention of beginning teachers?

Additionally, most of these studies have often been conducted in secondary education (e.g. Aarts et al., 2020; Helms-Lorenz et al., 2013; Mommers et al., 2021; Wubbels, 1987), leaving aside primary education. This, while a difference of teachers leaving the profession between primary and secondary teachers has been found, where primary teachers stay on average 1.6

years longer than secondary teachers (Singer, 1992). To study the differences between primary and secondary school teachers on the effect of informal support on their intention to quit, with job satisfaction as a mediating factor, the next research question will be addressed using a comparative approach:

- Question 2: To what extent does this effect differ between beginning primary school teachers and beginning secondary school teachers?

In the next theoretical section, the concept of informal support and job satisfaction will be further developed.

Theoretical Framework

Informal support ' beginning teachers retention

Recent research points out the importance of informal teacher networks on their induction (Coppe, 2023). These informal teacher networks can be useful for support, for example as informal mentorship (Desimone et al., 2014) or as professional support to develop skills and competencies (Smith & Ingersoll, 2004). The definition of this informal network of teachers that leads to these forms of informal support, is often referred to as social capital and originated in the work of Bourdieu (1986). Social capital is originally described as 'all or the potential resources linked to being a member of a group.' Coleman (1988) suggested that social capital is all social interactions and relationships within a network, individuals can benefit from to achieve certain goals. Putnam (2000) adds a dimension by pointing out the importance of generalised reciprocity of these relationships where all members of a network benefit.

In the research scholarship on teacher induction, social capital has become an increased interest by mapping teacher interaction through social network analysis (SNA) (Baker-Doyle, 2010; Gilman et al. 2022; Rienties & Hosein, 2015). It has been used to

analyse how a teachers' position in a network, predicts and influences their performance (Woodland & Mazur, 2019), how and with whom they interact to develop academically and reflect (Rienties & Hosein, 2015), and to show importance of peer interactions in the process of teachers' work socialization (Coppe et al., 2022). A systematic review of Demir (2021) on social capital, found that a majority of studies have shown a positive influence of social capital on successful teacher induction.

An important but often forgotten factor of informal support, is the emotional support teachers need as an outlet for their feelings, challenges, and frustrations about their teaching (Baker-Doyle, 2011; Rienties & Hosein, 2015). Boyle et al. (1995) found student misbehaviour next to workload, to be factors predicting teacher stress. When teachers experience a negative stress response, such as job-related stress improperly addressed (Betoret, 2006), it could become problematic stress outcome, if over a longer period of time the stress response is not dealt with. This could lead to teachers leaving the profession, because of burn-out (Betoret, 2006). Job satisfaction can act as a mitigating factor when teachers experience challenges and is found to be influenced by informal support (Thomas et al., 2020).

Job satisfaction' induction

Job satisfaction (i.e. worker satisfaction), was found to influence the intentions of workers to stay in or leave the profession (e.g. Chapman, 1983; Mueller & Price, 1990; Toropova et al., 2021)). Specifically for beginning teachers, Stockard & Lehman (2004) found job satisfaction to be a crucial factor influencing teacher retention. There have been multiple studies examining the factors that influence teacher job satisfaction (e.g. Dreer, 2024; Edinger & Edinger, 2018; Toropova et al., 2021; Vidic et al., 2021), but the outcomes seem to be somewhat controversial. It has been found that student misbehaviour has an

influence on job satisfaction because more student misbehaviour tends to lead to more emotional exhaustion (Hastings & Bham, 2003; Liu & Meyer, 2005). Lui & Meyer (2005) suggest that a collegial environment may help teachers' exhaustion, as resolving these student behavioural problems requires consistent support from the school leadership and colleagues.

Recently Alkar et al. (2023) did a qualitative research and found the socio-economic status (SES) of the school to matter to job satisfaction of teachers. Previous research (Matsuoka, 2015) indicates that school SES has an effect through the frequency of students' behavioural problems. When teaching at higher-SES schools, teachers tend to face fewer student behaviour problems, resulting in higher job satisfaction. Additionally, Camp (1987) and Vidic et al. (2021) found students' behavioural problems can contribute to the job satisfaction of teachers. Karaküktük et al (2014) found likewise an increase in students' behavioural problems, when school size increased.

A difference was found between job satisfaction of teachers at the primary level and the secondary level of teaching, where teachers of the secondary level were less satisfied (Heyns, 1988). Additionally, Billingsley (1993) did a literature review on teacher retention in special and general education and found secondary teachers were more likely to leave the profession because they were less satisfied.

The next method section of this study will be a further description of the decisions made to ensure a transparent and reproducible procedure.

Method

Participants and data collection

This study is part of a bigger research project. An online survey is used to collect information from research participants. Participants ($n = 2086$) were beginning primary and secondary school teachers mainly in French speaking Belgium ($n = 1943$) and a few in the

Netherlands ($n = 143$). The sample concludes a fairly similar number of primary teachers ($n = 1018$) and secondary teachers ($n = 1068$). Because of missing data ($n = 307$) the sample size of the analysis was lower ($n = 1779$). For this study, beginning teachers are defined as teachers within five years working in the profession (Henry et al., 2011). The first data collection moment was between January and March 2023. A second data collection moment is currently being conducted, in the Netherlands only. Distributing the survey took place by directly distributing to teachers and online social network platforms. The survey was divided in three sub-parts. The first part was related to demographic information such as gender, level of diploma and the type of teacher certificate – since this differs according to country. Other personal information in the first part was whether the teachers were teaching in primary or secondary school, the approximative school size and the social-economic status (SES) of the school. The second part of the survey contained a name generator (Borgatti et al., 2013) to obtain data on the support being received from colleagues. The name generator assigned nicknames since there is no interest in the actual names of colleagues. It includes two questions about the informal support they have received. For the last part, teachers job satisfaction and intention to quit, were measured with two psychometric scales.

Measures

Independent variable

The independent variable, teachers' informal support, was measured by separating the support into professional support and the emotional support since professional support is used to help develop (Borgatti et al., 2013) and the emotional support is used as an outlet (Rienties & Hosein, 2015). For both forms of informal support, the frequency and the quality of interactions was measured. Frequency is a relevant way to operationalize the informal support because the more interactions that take place, the more resources teachers can use to

help them develop (Borgatti et al., 2013) or help them as an outlet for their feeling (Rienties & Hosein, 2015). First, there was a question to make a list of all the colleagues that offer professional support (*‘Maak een lijst van de collega’s van wie u **professionele ondersteuning** krijgt.’*¹). There was a maximum of 15 colleagues. The frequency of interactions was ranged from 1 to 5 (1 = once every three to four months, 5 = every day). Quality is another relevant way to operationalize the informal support, because the higher the quality of interactions, the more interactions are potential resources (Borgatti et al., 1998) or can be used as an emotional outlet (Rienties & Hosein, 2015). The quality of interactions was measured ranging 1 to 5 (1 = never useful, 5 = always useful). To get an overall score for the professional support, the scores of quality and frequency were summed. The same questions on frequency and quality of interactions were asked for the emotional support beginning teachers receive. To get an overall score for the emotional support, the scores of quality and frequency were summed. Then, to make an overall score for informal support, the emotional support, and professional support are summed.

Mediator

To measure job satisfaction, the scale of Eisenberger et al. (1997) was used. The internal reliability of the scale was Cronbach’s $\alpha = .884$. There were 4 items that together formed a global score for job satisfaction (example item: *‘Over het algemeen ben ik zeer tevreden met mijn baan als docent’*²) The items were ranging from 1 to 5 (1 = completely disagree, 5 = completely agree).

Dependent variable

¹ English translation: *‘Make a list of the colleagues that offer professional support’.*

² English translation: *‘In general, I am satisfied working as a teacher’.*

For the intention to quit, the scale of Becker & Billings (1993) and McInerney et al. (2018) was used. The internal reliability of the scale was Cronbach's $\alpha = .950$. There were 3 items that measured the intention to quit (example item: '*Ik denk erover na om het lerarenberoep te verlaten*'³) The items were ranging from 1 to 5 (1= completely disagree, 5= completely agree).

Control variables

Job satisfaction can be influenced by school size through increased amount of student misbehaviour (Camp, 1987; Vidic et al., 2021). Some research suggests that students' socio-economic status (SES) influences teacher job satisfaction (Alkar et al., 2023; Matsuoka, 2015) or intention to quit (Ingersoll, 2001; Scafidi et al., 2007). Teacher seniority is a variable controlled for since the experience of teachers within a cohort of 5 years can differ. Correlation analyses showed no significant relation between the school SES, the mediator and dependent variable (see Table 1). Therefore, School SES was eventually not controlled for.

Analysis

To answer the research questions, Jamovi was used to pass through different analytic steps. First correlation analyses (see Table 1) were done to check the correlation of the control variables and the mediator with the dependent variable.

Table 1

Correlation Matrix - Pearson's r

	School SES	School size	Teacher seniority
Informal support	.014	.017	.085***

³ English translation: '*I am thinking about leaving the teaching profession.*'

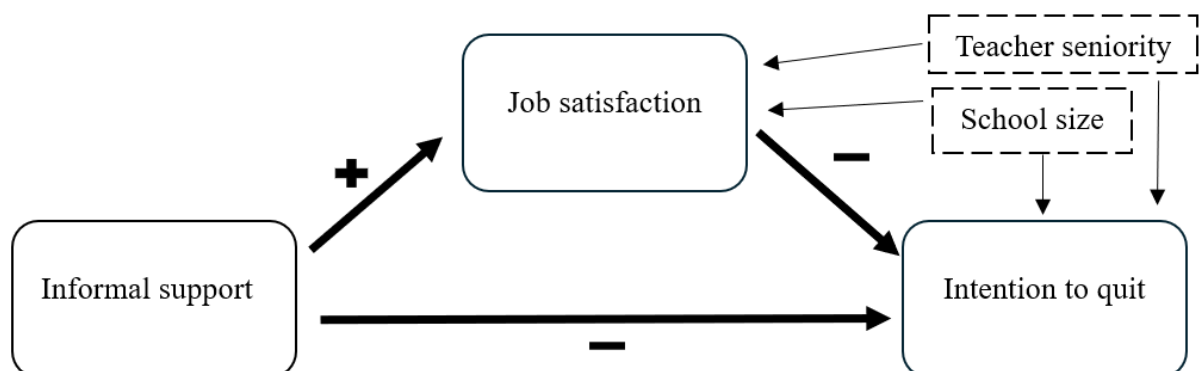
Job satisfaction	.043	.098***	-.084***
Intention to quit	-.033	-.049*	.114***

Note: * $<.05$, ** $<.01$, *** $<.001$.

Then, to analyse the effects, a mediation model was used (see Figure 1). The independent variable, informal support, might have a positive influence on job satisfaction. Job satisfaction might have a negative influence on the intention to quit. The informal support might also have a negative influence on the intention to quit. Furthermore, an indirect effect is expected from informal support through job satisfaction on intention to quit.

Figure 1

Analytical model of hypothesis – Independent variable, mediator, dependent variable and control variables.



Results

First, the findings for the first research question will be addressed. Then, the results for primary school teachers and secondary school teachers will be described and compared to answer the second research question.

Research Question 1: ‘To what extent does informal support influence job satisfaction and in turn retention of beginning teachers?’

The results of the analysis (see Table 2) revealed that informal support has a significant and positive effect on beginning teachers’ job satisfaction ($\beta = 0.207$; $p < .001$). This means that an increase in the amount of informal support beginning teachers receive leads to an increase of job satisfaction. Second, job satisfaction and intention to quit have a significant and negative ($\beta = -0.558$; $p < .001$) relationship. That is, when beginning teachers’ job satisfaction increases, their intention to quit decreases. Third, the relationship between informal support and intention to quit was found to be significant and negative ($\beta = -0.075$; $p < .001$). When beginning teachers receive more informal support from colleagues, they have less intention to quit.

Table 2

Mediation model estimates – independent variable, mediator and dependent variable: informal support, job satisfaction and intention to quit.

Relation	<i>B (S.D.)</i>	β	<i>p-value</i>
Informal support -> Job satisfaction	0.039 (0.004)	.207	<.001
Job satisfaction -> Intention to quit	-0.628 (0.023)	-.558	<.001
Informal support -> Intention to quit	-0.016 (0.004)	-.075	<.001

Informal support ->	Job satisfaction ->	-0.024 (0.003)	-.115	<.001
Intention to quit				
Teacher seniority ->	Job satisfaction	-0.065 (0.015)	-.100	<.001
Teacher seniority ->	Intention to quit	0.057 (0.014)	.077	<.001
School-size ->	Job satisfaction	0.000 (0.000)	.090	<.001
School-size ->	Intention to quit	0.000 (0.000)	.011	.557

Note: coefficient B is unstandardized; coefficient β is standardized. Grey are the control variables.

Furthermore, the analysis showed a mediation effect of informal support on intention to quit through job satisfaction ($\beta = -0.115$; $p < .001$). Overall, these results indicate that when informal support increases, the job satisfaction increases and in turn has a negative effect on intention to quit.

Research Question 2: 'To what extent does this effect differ between beginning primary school teachers and beginning secondary school teachers?'

Table 3 presents the results for primary teachers. The results show that informal support has a significant and positive effect on beginning primary teachers' job satisfaction ($\beta = 0.189$; $p < .001$). This means when there is an increase of informal support, the job satisfaction increases as well. Second, a negative and significant effect was found of job satisfaction on intention to quit ($\beta = -0.528$; $p < .001$). With an increase of job satisfaction comes a decrease of the intention of beginning primary teachers to quit. Third, when the informal support increases this has a significant and negative effect on the intention to quit ($\beta = -0.099$; $p < .001$). That is, when the beginning primary teachers receive more informal support from colleagues, they have less intention to quit.

Table 3

Mediation model estimates – primary teachers

Relation	<i>B (S.D.)</i>	β	<i>p-value</i>
Informal support -> Job satisfaction	0.035 (0.006)	.189	<.001
Job satisfaction -> Intention to quit	-0.600 (0.034)	-.528	<.001
Informal support -> Intention to quit	-0.021 (0.006)	-.099	<.001
Informal support -> Job satisfaction -> Intention to quit	-0.021 (0.004)	-.100	<.001
Teacher seniority -> Job satisfaction	-0.058 (0.022)	-.089	.008
Teacher seniority -> Intention to quit	0.090 (0.006)	.189	<.001
School size -> Job satisfaction	0.000 (0.000)	.058	.044
School size -> Intention to quit	0.000 (0.000)	.012	<.001

Note: coefficient B is unstandardized; coefficient β is standardized. Grey are the control variables.

There has also been found an significant indirect effect of informal support of primary teachers on their intention to quit ($\beta = -0.100$; $p < .001$). This means when informal support beginning primary teachers receive from colleagues increases, this effects the job satisfaction which in turn decreases the intention to quit.

Table 4 presents the results for secondary teachers. The results for secondary teachers revealed informal support has a significant and positive effect on beginning secondary teachers' job satisfaction ($\beta = 0.227$; $p < .001$). When the informal support increases the job satisfaction increases as well. The relationship between job satisfaction and intention to quit is significant and negative ($\beta = -0.583$; $p < .001$). This means when beginning secondary teachers' job satisfaction increases, the intention to quit decreases. The results revealed no significant relationship between informal support and intention to quit ($\beta = -0.053$; $p = .057$).

Table 4*Mediation model estimates – secondary teachers*

Relation	<i>B (S.D.)</i>	β	<i>p-value</i>
Informal support -> Job satisfaction	0.042 (0.006)	0.227	.057
Job satisfaction -> Intention to quit	-0.660 (0.032)	-0.584	<.001
Informal support -> Intention to quit	-0.011 (0.006)	-0.053	<.001
Informal support -> Job satisfaction -> Intention to quit	-0.028 (0.004)	-0.133	<.001
Teacher seniority -> Job satisfaction	-0.071 (0.020)	-.110	<.001
Teacher seniority -> Intention to quit	0.027 (0.019)	.037	.153
School size -> Job satisfaction	0.000 (0.000)	.043	.162
School size -> Intention to quit	0.000 (0.000)	.012	.843

Note: coefficient B is unstandardized; coefficient β is standardized. Grey are the control variables.

There has also been a significant indirect/mediation effect found ($\beta = -0.133$; $p < .001$). This means when informal support beginning secondary teachers receive from colleagues increases, this effects the job satisfaction which in turn decreases the intention to quit.

To answer the second research question, the standardized coefficients for primary school teachers and secondary school teachers were compared as shown in Table 5.

Table 5*Comparing standardized coefficients – primary teachers vs secondary teachers*

	Primary teachers	Secondary teachers

Relation		β	β
Informal support ->	Job satisfaction	0.189***	0.227
Job satisfaction ->	Intention to quit	-0.528***	-0.584***
Informal support ->	Intention to quit	-0.099***	-0.053***
Informal support ->	Job satisfaction ->	-0.100***	-0.133***
	Intention to quit		
Teacher seniority ->	Job satisfaction	-.089**	-.110***
Teacher seniority ->	Intention to quit	.189***	.037
School size ->	Job satisfaction	.058*	.043
School size ->	Intention to quit	.012***	.012

Note: * $<.05$, ** $<.01$, *** $<.001$. Grey are the control variables.

The effect of informal support on job satisfaction was significant for primary teachers, but not for secondary teachers. For primary teachers this means when they receive more informal support, they are more satisfied with their teaching job. Second, the effect of job satisfaction on the intention to quit was slightly smaller (see Table 5) for primary teachers than for secondary teachers. This means that job satisfaction might be a more important factor for secondary teachers than for primary teachers when it comes to their intention to leave the teaching profession. Third, the analysis revealed (see Table 5) a significant relationship of informal support on the intention to quit for both groups of teachers but for primary teachers the standardized coefficient is slightly bigger. The analysis also demonstrated the indirect effect of informal support through job satisfaction on intention to quit, to be slightly smaller for primary teachers ($\beta = -0.100$; $p < .001$) than for secondary teachers ($\beta = -0.133$; $p < .001$).

Discussion

This study empirically examined the relationship between the informal support beginning teachers receive and their intention to quit where job satisfaction acted as a mediator. The differences of this relationship between primary and secondary school teachers were also explored. Informal support as described in present study, encompass professional and emotional support both measured with frequency and quality. The aim of the study was to add to the literature on the effect of informal support on the intention to quit for beginning teachers in the Netherlands and Belgium. In the next section the findings, limitations and implications of this study will be discussed.

The results show a small positive and significant effect of informal support on job satisfaction. Even though the effect is small, this would mean that beginning teachers are often more satisfied with their job when they receive more informal support, being either professional or emotional support. This is in line with previous research done (Edinger & Edinger, 2018; Thomas et al., 2018). Like Chapman (1983) previously suggested, the results show job satisfaction has a substantial negative and significant effect on the intention to quit. This means an important influence on retention decisions of beginning teachers is job satisfaction, which is in line with Stockard & Lehman (2004) who found job satisfaction to be the most important influence on retention decisions of first-year teachers. The direct effect regarding informal support on the intention to quit was small and significant. While confirming previous findings of Struyve et al. (2016), the result found is smaller than the effect found by Struyve et al (2016).

The second objective was to explore the differences of the effect between primary and secondary school teachers. The findings suggest that while for primary school teachers the relationship between informal support and the intention to quit is partially mediated by job

satisfaction, this is not the case for secondary teachers. The difference between them is the effect of informal support on job satisfaction. For primary teachers, a significant and positive effect was found while no significant effect for secondary teachers was found. An alternative explanation could be, that for secondary school teachers the importance of informal support mostly focusses on the integration into the collaborative aspect of their schools' community (Coppe et al., 2022) or strengthening self-efficacy (Tschannen-Moran & Hoy, 2007).

Limitations

Given the sample existed mostly of Belgium participants, generalising the results to the Dutch education system is something to be wary of. The structure of the primary and secondary education systems might be remarkably similar but only about 7% of the sample concluded Dutch beginning teachers. In other words, for the Dutch education system the findings of the study should be regarded mainly as indicative. Further research could evaluate the findings on a larger scale for the Dutch education system. Despite its lack of generalisability to the Dutch education system, present study involved a big-scale sample of 1779 teachers. Cohen (1998) stated that the larger the sample size (given other things stay equal), the smaller the error and the greater the precision of the sample results. Increases in sample size, increase statistical power, therefore the probability of detecting the phenomenon under test (Cohen, 1998). This means despite the generalisability to the Dutch education system, generalising to the Belgium education system is possible.

Second, the collection of data was quantitative and therefore limited when trying to picture a nuanced effect of informal support on intention to quit. Quantitative network data could be supplemented by qualitative data (Crossley, 2010). That is, the qualitative data on teachers' perception of their informal support could explain further in depth the ways beginning teachers receive and perceive informal support. Specifically for differences

between primary and secondary school teachers, future research could try a mixed-method approach to investigate the similarities and differences in depth.

Third, the use of cross-sectional data is another limitation in terms of talking of causality (Ghosh et al., 2016). Cross-sectional data do not allow definite causal claims, even if the statistical analysis indicates mediation, since explanations for the tested model can also fit a set of correlations and covariances (Ghosh et al., 2016; Stone-Romero & Rosopa, 2010). Therefore, findings of this study should be interpreted with caution.

Implications

Despite these limitations, this study contributes to the research field on the attrition of beginning teachers. To overcome the high attrition rates, it requires thinking about what influences beginning teachers in their decision to stay in the job. This study showed how informal support and job satisfaction play a role in the decision of beginning teachers to stay in the job.

Helms-Lorenz & van der Grift (2013) found schools providing more formal support experience lower attrition rates, which gives, combined with the findings of this study (i.e. informal support has a negative and significant effect on the intention to quit) a reason to assume that generally speaking, schools providing more support will have less teachers leaving. Future research could test the combined effects of formal and informal support on teacher retention decisions.

The choice of research design determines the extent to which a study can make causal claims (Nimon & Astakhova, 2015) and therefore a longitudinal design with a minimum of two repeated observations is recommended (Ghosh et al., 2016). Another way to provide more support for a causal model in further research, is an experimental design (Ghosh et al., 2016).

The findings also indicated that although informal support is essential, it alone is insufficient. Since informal support is offered by peers (Coppe et al., 2022; Struyve et al., 2016), school employees, especially school teachers, should be made aware of the importance of informal support for beginning teachers for professional development or emotional relieve. Therefore, creating opportunities for contact and shaping structural conditions for sharing and asking is important (Brown et al., 2024).

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