



Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching



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H I G H L I G H T S

- Attrition differs according to gender, teaching degree and teachers' experience.
- Lack of future prospects is the main reason for leaving the profession early.
- Teachers' experience explains variances for all but one motive: job satisfaction.
- Reasons for attrition weighed less heavily on teachers without teaching experience.

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A B S T R A C T

This study investigates the motives for teacher attrition of newly qualified teachers who never started a teaching career and those dropping out after a short period. A survey was conducted among teachers with ($N = 154$) and without ($N = 81$) teaching experience. Five reasons for attrition were discerned: job satisfaction, school policies, workload, future prospects and relations with parents. The results demonstrated that a lack of future prospects was the predominant reason for attrition. The effect of teaching experience was significant for most motives, in addition to the impact of gender or teaching qualification. Teachers with experience do not take exit decisions lightly.

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High rates of attrition during the first year (s) of teaching has caused problems in maintaining the supply of qualified teachers (Cochran-Smith, 2004), with significant teacher shortages as a consequence in several countries. Depending on the source, percentages of attrition vary between 30 per cent and 50 per cent (Darling-Hammond, 2000; Ingersoll, 2001; Ingersoll & Smith, 2003; Johnson & Birkeland, 2004; Smethem, 2007), with many qualified teachers never entering a classroom or leaving the job after a short period of teaching experience.

Attrition is regarded by many as an important determinant in the ineffectiveness, low performance (Ingersoll, 2001) or lack of

quality in contemporary education (Hahs-Vaughn & Scherff, 2008). As a consequence, teacher retention should be of continuous importance for every educational system. Understanding who typically leaves the profession and why they chose to do so can help policy makers invest in initiatives that target the teachers most at risk for quitting and ameliorate the conditions that appear most salient in teachers' decisions to leave (Guarino, Santibanez, & Daley, 2006).

A stable finding among studies on teacher recruitment and retention is that attrition is high for young and newly qualified teachers and lower for older and more experienced teacher until they reach ages at which retirement is feasible (Grissmer & Kirby, 1997; Tye & O'Brien, 2002). However, previous research has not always acknowledged that the group of teachers leaving the profession within five years encompasses two distinct categories of dropouts. On the one hand, it contains a group of teachers who, although graduated from a teacher-training program, never started

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a teaching job (Bruinsma & Jansen, 2010; Thomson, Turner, & Nietfeld, 2012). On the other hand, it includes teachers who started a career as a teacher but turned to other jobs shortly after (Dolton & Von der Klaauw, 1995; Johnson, Berg, & Donaldson, 2005). However, whether or not teachers actually had teaching experience with teaching practice may play an important role in their motives for not abiding a career in teaching. Explicitly targeting this distinction may help in advancing our understanding of the exit problem. The current study therefore explores teachers' motives for leaving the teacher profession and investigates whether or not the nature and prevalence of these motives differentiates between teachers with and graduates without actual teaching experience. As previous research has shown significant differences in attrition according to gender and level of teaching, these variables were taken into account as control variables (e.g. Borman & Dowling, 2008; Kelly, 2004).

1. Attrition

1.1. Outlining the concept

Commonly, a distinction is made between teachers leaving the teaching profession as a 'personal choice' and teachers exiting due to 'natural causes', such as retirement, maternal leave, resignation, temporary leave or career interruption. The latter kind of drop-out is usually indicated by the term wastage, while the first is labelled as turnover (Macdonald, 1999; Williams, 1979). Turnover, in turn, encompasses two types of attrition: transfer attrition and exit attrition (Billingsley, 1993). Transfer attrition, otherwise known as migration (Hahs-Vaughn & Scherff, 2008), refers to teachers who leave their current position for a teaching career elsewhere, within or outside their current school district. Exit attrition, in contrast, refers to teachers who leave the teaching profession and change careers (Ingersoll, 2001). *The present study is solely concerned with exit attrition.*

Previous research has convincingly shown that, with regard to exit attrition, the early years of teaching are crucial (Borman & Dowling, 2008; Guarino et al., 2006). Although the number of exits vary considerably between countries and periods in time (Stokking, Leenders, De Jong, & Tartwijk, 2003), there seems to be a degree of consensus that after a period of five years, a turning point is reached. In countries such as Australia, Norway, the UK, and Spain, exit numbers in the first five years of teaching are usually between 30 and 40 per cent; while they are about 50 per cent in Germany, Italy and the Netherlands (Kyricacou & Kunc, 2007; Purcell, Wilton, Davies, & Elias, 2005; Smithers & Robinson, 2003; Stokking et al., 2003). In Flanders the attrition rate according to official sources is significantly lower and varies around sixteen per cent (Department of Education, 2013). Afterwards, attrition numbers decrease steadily (Kirby & Grissmer, 1993) and teachers tend to remain in the teaching profession on a more permanent basis (Stinebrickner, 1998). Consequently, we opted to aim our research at *exit attrition up until five years after graduation.*

The concept of early exit attrition appears to obscure a further distinction, as some certified teachers quit their teaching profession within the first five years, while others decide not to pursue a teaching career at all. Although both groups have received some attention separately (Bruinsma & Jansen, 2010; Thomson et al., 2012), few to no studies have compared the two groups. Therefore the current study explores *early exit attrition distinguishing between teachers who did not start a teaching career and those who left the profession early.* In the remainder of the paper we will relate to this distinction by referring to 'having actual teaching experience or not'.

Finally, although it can be informative to investigate attrition rates as such, if we want to understand 'why' these teachers chose not to become or to remain a teacher a warmer, more qualitative approach seems in order. In line with several other studies (e.g. Watt & Richardson, 2007), we believe that exploring teachers' motives to leave to profession may provide additional insights. Our study is therefore concerned with *motives for early exit attrition according to having actual experience or not.*

1.2. Motives for attrition

Teachers may have personal reasons or job-related motives for exiting the teaching profession. Often these are based on individual experiences of the job and/or influenced by factors in the school context (Beltman, Mansfield, & Price, 2011; Skaalvik & Skaalvik, 2011).

1.2.1. Personal expectations

The match between what one expects, and what one experiences on the job, informs career choices (Kyricacou & Coulthard, 2000). For instance, although an altruistic desire to serve society and to 'make a difference' is one of the primary motivations for pursuing teaching and staying in the teaching profession (Guarino et al., 2006; Smethem, 2007), the social respect and acknowledgement of the profession is often perceived as being low (Buckley, Schneider, & Shang, 2005). In their study, Kyricacou and Kunc (2007) found four key dimensions that teachers incorporate to assess this (mis)match between expectations and experiences: (1) supportive school management, (2) adequate time, (3) attentive, cooperative students and (4) a happy personal life. Their findings demonstrate that the more these factors match teachers' expectations, the more enthusiastic teachers are about teaching and their career choice. On the other hand, if teachers experience disappointment with regard to these dimensions, they express more negative thoughts about teaching and are less convinced about having chosen the right career path (Kyricacou & Kunc, 2007).

Based on the expectancy-value model in motivation, the 'Factors Influencing Teaching-Choice'-project (FITChoice-project) explored motivational factors in student teachers that were influential in their decision to become a teacher (Watt & Richardson, 2007). Results demonstrated that (1) intrinsic value (2) being able to work with children and adolescents, (3) perceived teaching ability, (4) the possibility of making a social contribution and (5) to shape the future of children or adolescents were the primary motives for choosing teaching as a career and were also moderately to strongly related to satisfaction with this choice (Watt & Richardson, 2007). Differences in these motives and perspectives were also found to be related to whether or not student teachers were planning on persisting in their career or foresaw switching or quitting in the near future after their graduation (Watt & Richardson, 2008). Recent research demonstrated that motives for choosing a career as a teacher are more similar than different across samples in different countries (Australia, United States, Germany and Norway) (Watt et al., 2012).

1.2.2. Factors in the school context

Although the choice to switch profession or end a career is made by the individual, often factors in the school context are identified as causes of stress, dissatisfaction or frustration, which in turn may lead to motivation to leave (Skaalvik & Skaalvik, 2011). Sources of discontent range from simple facilities and conditions, such as air quality in classrooms, heat, lighting, school size (Buckley et al., 2005), to relations with students and/or parents (Macdonald, 1999; Tye & O'Brien, 2002) and support by colleagues and management (Billingsley, 1993; Darling-Hammond, 2003).

Moreover, novice teachers perceive imposed change and innovations by top down approaches as a threat. They not only get the impression that their teaching skills are insufficient, but they also feel treated as ‘technical skilled workers’, instead of autonomous, emancipated and qualified professionals (Goodson, 2003; Smethem, 2007; Tyé & O’Brien, 2002).

As a final factor, research has demonstrated that students and their parents may challenge teachers in their willingness to remain within the teaching profession. With students, perceptions of a lack of discipline in the classroom (Ingersoll, 2000; Macdonald, 1999), a lack of motivation for studying and a lack of interest in learning (Tyé & O’Brien, 2002) and poor learning outcomes tend to associate with ‘teacher exit’ (Mont & Rees, 1996). A hostile attitude on the part of parents, a lack of support from parents and high parental expectations of teachers (also with respect to what use (d) to be parental tasks) make the teaching profession often hard, unpleasant and unsatisfactory (Tyé & O’Brien, 2002).

1.3. Relation between attrition and personal variables

Previous research has related attrition to various personal variables such as gender (e.g. Kelly, 2004; Stinebrickner, 1998), age (e.g. Arnold, Choy, & Bobbitt, 1993; Feng, 2005) or level of teaching (e.g. Henke, Zahn, & Carroll, 2001; Murnane & Olson, 1989). In our current study, our main interest is the relation between attrition and the fact as to whether or not graduates did not start teaching or left the profession within five years after graduation. To our knowledge, no previous study has adopted this specific research-angle. However, to assess the importance of having actual experience as a graduated teacher or not, our study incorporates two personal variables that previous research has demonstrated to be related to attrition as control variables: gender and teaching level.

With respect to the gender, research results are not unequivocal. Whereas multiple studies claim that women have a significantly higher chance of exit attrition compared with men (Kelly, 2004; Kirby & Grissmer, 1993; Stinebrickner, 1998), many other investigations have found the reverse (Boyd, Lankford, Loeb, & Wyckoff, 2005; Dolton & Von der Klaauw, 1995; Strunk & Robinson, 2006). Regarding the level of teaching, results of previous studies are more in line. In general, teachers in primary education are less likely to change jobs, compared to teachers in secondary education (Murnane & Olson, 1989). In particular, teachers with subject specialties in mathematics, sciences and (foreign) languages are more likely to quit teaching in order to pursue other careers (Arnold et al., 1993; Borman & Dowling, 2008; Henke et al., 2001; Murnane, Singer, Willett, & Olson, 1991; Strunk & Robinson, 2006).

2. The current study

The current study explores the complex phenomenon of early career exit attrition for teachers. As main starting point, the study puts forward the idea that the moment at which teachers decide not to pursue a teaching-career may have an important impact on their motives for quitting. In addition, gender and type of type of teaching qualification are incorporated as control variables. The latter is being used as a proxy for the level at which graduates are teaching, since not all graduates actually started teaching. The following research questions guided our investigation:

- (1) Does teacher attrition vary according to personal variables such as having actual experience with teaching or not, gender or type of teaching qualification?
- (2) What motives do certified teachers have for their exit attrition?

- (3) Do the nature and importance of motives differ according to whether or not students have experience in teaching and does this distinction remain after controlling for other personal variables (gender and type of teaching qualification)?

3. Method

To answer these research questions, a large-scale survey study was conducted in Flanders, the Dutch speaking part of Belgium. Flanders instead of the whole of Belgium was chosen as the region of investigation as the authority for teacher-education policies resides with the regional governments, not with the national government. Given the fact that regional policies differ and that these differences might influence teachers’ motives for attrition, we opted to include only a single region.

3.1. Context: (teacher) education in Flanders

To enhance understanding of the design and results of our study, we provide a short description of the educational system and the types of teacher education in Flanders.

3.1.1. The educational system in Flanders

In Belgium, mandatory education is organized between the ages of six and eighteen. Kindergarten or non-compulsory pre-primary education is available for children from two and a half to six years of age. Primary education is aimed at children from six to twelve and comprises of six consecutive years of study.

Secondary education is intended for young people aged twelve to eighteen. It is comprised of three stages, each spanning two years. The first stage is largely devoted to the core curriculum. From the second stage on, four different educational types can be distinguished based on their educational aims, namely: general education, technical education, arts education and vocational education.

Students holding a degree in secondary education have unlimited access to higher education. As a result, the student population in higher education in general and teacher education in particular is heterogeneous.

3.1.2. Teacher education

In the Flemish higher education system, two types of teacher training are provided. On the one hand, a three-year professional bachelor programme is organized at university colleges/polytechnic universities (180 credits). Students chose on of three study-options, preparing them for a job in kindergarten, primary education or the lower years of secondary education respectively. In this training programme, a teaching internship of 45 credits is included. Students can enrol in this programme after successfully graduating from secondary education. The teacher education programme provides them with the pedagogical knowledge and didactical skills as well as the majority of the content knowledge on the topics the will be teaching after graduation.

On the other hand, a specific teacher-training programme is set up for students who have already obtained a diploma in higher education or adult education. Universities and centres for adult education each provide the consecutive teacher education programme. The programme is comprised of a theoretical module (30 credits) and a practical module (30 credits). Theoretically, students can finish the programme in one academic year. However, as most students’ are already working (outside education), they tend to spread the programme across multiple years. Given the fact that students have already obtained a diploma in a particular content-area, the programme mostly focuses on pedagogical knowledge

and didactical skills. Both initial and special/consecutive types of teacher training programme lead to the teacher qualification (Flemish department of Education and Training, 2008).

3.1.3. Teaching careers

Having acquired certification, a teaching career in kindergarten/pre-primary, primary or secondary education generally advances along three important steps: (1) *temporary appointment of definite duration* (i.e. appointment of no more than one school year either in a vacant or non-vacant position), (2) *temporary appointment of continuous duration* (i.e. uniform priority system) after a minimum of three school years and (3) *permanent appointment to a recruitment office* (i.e. school) after a minimum of five years. All participants in our study therefore held a temporary appointment of some sorts. Regarding attrition, recent official sources report early exit attrition to be sixteen per cent overall and twelve, fourteen and twenty two per cent for kindergarten, primary education and secondary education respectively (Department of Education and Training, 2013).

3.2. Sample

Given the differences in enrolment, duration and orientation of the aforementioned teacher-training programmes, we opted to investigate motives for attrition in a single programme. As the majority of students is enrolled in the three year initial programme (Flemish Department of Education and Training, 2008), we conducted our study in this programme.

For the purpose of the current study, it was necessary to reach both teachers who never started teaching after graduation and those who were no longer teaching five years after graduation. All eighteen university colleges/polytechnic universities providing a teacher-training programme in Flanders were invited to participate in the study by providing contact information on teachers who had successfully graduated five years earlier. In total thirteen colleges agreed to participate in the study. Enrolment in these colleges varied from 97 to 448 students. Participants per study option (kindergarten, primary education and lower secondary education) ranged from 19 to 175. Fifty nine per cent of the participating colleges offered all three study-options. In addition thirty per cent organized only two programmes. Most colleges also provided other vocation-oriented programmes at a professional bachelor level such as nursing or applied psychology.

To distinguish between the certified teachers who were currently teaching, and those who were not (anymore), all graduates ($N = 2735$) were contacted by telephone. 2309 graduated teachers were effectively reached, 370 of which were not teaching five years after graduation. This led to an early exit attrition rate of sixteen per cent. These respondents were asked whether they started a career in teaching or not. In addition they were asked to fill out a questionnaire on their motives for attrition (see Section 3.3) and return it, either in hard copy or electronically. For the 47 students who were not willing to participate, lack of time or enthusiasm was the most predominant reason for not participating (60% of the cases), followed by the refusal of parents to provide contact information on their son or daughter (21% of the cases). Whereas 323 graduates were willing to participate on the phone, only 235 respondents successfully returned the completed questionnaire, which resulted in a response rate of 64 per cent (out of 370). Reminder e-mails did not result in heightening the participation rate.

3.3. Instruments

Information on the personal variables gender and type of teaching qualification was obtained through the student

administration of the participating university colleges. To gain insight into teachers' motives for early exit attrition a new questionnaire was developed. Existing literature was reviewed for teachers' motives for leaving the profession (see 1.2). To design the instrument as broadly as possible, no single model or theoretical framework (e.g. FIT-choice framework) was used as reference. Instead all possible motives were inventoried. The resulting instrument was piloted with ten graduated teachers who did not teach anymore to check for face-validity and possible missing motives. As a result, 66 motives for early exit attrition were retained. For each motive, respondents had to indicate on a five point-scale whether the reason had no effect on their decision not to teach (anymore) (N.A., not applicable) or whether it played a small part (+), a considerable part (++), a large role (+++), or a very significant role (++++) in their decision not to teach (anymore). Some example-items are provided in Table 1. In an open question, participants could provide other motives for leaving the teacher profession. Overall, few participants specified an additional motive, in most cases a specification of a more general motive included in the questionnaire. This provided an indication that the questionnaire covered the majority of possible motives for early exit-attrition.

3.4. Analyses

Previous research has sometimes relied heavily on single-item indicators of attrition or raw frequency counts of motives. This approach maximizes the possibility of measurement error (e.g. Watt & Richardson, 2007). To counter this caveat, we choose to work with more encompassing constructs, measured by multiple items. To identify these underlying themes in our questionnaire, a Principal Component Analysis (PCA) was run. Subsequently, an Exploratory Factor Analysis (EFA) with varimax rotation was carried out to refine and interpret these components. Eigenvalues, the scree plot and theoretical interpretability were used to make a decision on the number of factors. A factor loading of at least $|0.40|$ was taken as a cut-off point to incorporate a specific item as an indicator for an underlying motive.

To explore the relation between teacher attrition and personal variables (RQ1), descriptive statistics and cross tabulations were computed. Descriptive statistics were also computed to analyse teachers' motives for attrition (RQ2). To explore the effect of having actual teaching experience after graduation on motives for attrition after controlling for gender and type of teaching qualification (RQ3), a stepwise strategy was followed. First, a multivariate general linear model was computed to assess the impact of the predictor and control variables on all motives. Both significance levels and effect-sizes were considered using Cohen's cut-off points (Cohen, 1988). Next, a series of hierarchical regression analyses was run. All predictors were dummified. Gender and type of teaching qualification were imputed as independents in the null model. Afterwards the experience-factor was added to the model. The significance of changes in the R^2 was investigated to assess whether or not adding experience as predictor significantly improved the model-fit.

4. Results

4.1. Preliminary analyses: factor structure and reliabilities

Based on the PCA and EFA, a five factor solution was deemed most appropriate. Thirty-six items were preserved as indicators. Together the five factors explained 53 per cent of the variance in motives.

Table 1
Overview of the five factors, reliabilities, factor loading and items.

Factor	Loading	Arguments I'm not teaching (anymore) because ...	
1. Job satisfaction and relation with pupils/students (12 items, $\alpha = .866$)	0.80	I experienced little satisfaction in my job as a teacher.	
	0.77	I didn't enjoy teaching much.	
	0.67	Students were poorly motivated.	
	0.62	Job contents fall short of expectations.	
	0.62	Students' learning outcomes were insufficient.	
	0.57	Students' progress in learning was minimal.	
	0.55	I made a wrong study choice.	
	0.55	I had difficulties with class management and discipline.	
	0.48	My expectations were disappointed.	
	0.46	I felt little enthusiasm for teaching.	
	0.44	I felt insecure in the classroom.	
	0.40	I was bullied by students.	
	2. School management and support (10 items, $\alpha = .873$)	0.81	I got little support from the school principal.
		0.69	I felt little support from the school and from educational policy.
0.66		I have had conflicts with the principal and/or colleagues.	
0.64		I had little contact with, and support from, colleagues.	
0.64		I experienced less autonomy compared to experienced colleagues.	
0.56		I often had to justify my actions in class to the principal or to colleagues.	
0.55		I was given annoying tasks and/or difficult classes.	
0.54		I experienced little guidance and support as a beginning teacher.	
0.52		I felt little engaged in the schools' policy.	
0.48		I experienced little recognition and respect as a teacher.	
3. Workload (6 items, $\alpha = .850$)	0.81	I had too much work out of school hours.	
	0.78	I had too little time to adequately prepare lessons.	
	0.73	Time pressures and stress in education are too high.	
	0.62	Too much administrative work is associated with the job.	
	0.54	I could not handle the job.	
	0.50	I was emotionally tired and burned out.	
4. Future prospects (5 items, $\alpha = .868$)	0.97	It is difficult to get a long-term contract.	
	0.98	There are few prospects for a permanent position in teaching.	
	0.64	There is too little demand for teachers in education.	
	0.63	Income is not guaranteed.	
5. Relations with parents (3 items, $\alpha = .882$)	0.50	My contract was not prolonged.	
	0.91	I experienced difficulties with parents.	
	0.81	I often had to justify my actions in class to parents.	
	0.67	I got little support from parents.	

- The first factor was called '*job satisfaction and relations with students*'. It contained twelve items and explained fourteen per cent of variance. It combined motives that concerned the teacher's motivation, enjoyment, expectations, study orientation, and job content, with items concerning difficulties in the teacher–student relation: bullying by students, class management, learning outcomes of students and safety. It seemed that problems with students and class management were strongly associated with teacher's motivation and job satisfaction in our sample.
- The second factor was labelled '*school management and support*' encompassing ten items and explaining thirteen per cent of variance. Items in this factor referred to lack of support of teachers by principals, and colleagues, inadequate induction, difficult or unwelcome tasks and poor involvement in the schools' policy.
- The third factor '*workload*' had six items and explained nine per cent of variance. It comprised reasons that had to do with time pressure, emotional tiredness and workload (including administrative work), often in the evenings or during holidays.
- The fourth factor, called '*future prospects*' also explained nine per cent of variance. Five items loaded on this factor. It encompassed the lack of prospects for reassignment (after a temporary position), a long-term contract or a permanent position, associated guarantees of income and lack of opportunities of career growth.
- The fifth and last factor concerned '*relations with parents*'. It consisted of three items and explained eight per cent of variance. The motive was concerned with a (negative) relation with parents.

Table 1 presents an overview of the factors, the items loading on them and the reliabilities. All scales were deemed sufficiently reliable.

4.2. *The relationship between attrition and personal variables (RQ1)*

This first research-question was concerned with the question as to whether or not attrition in our sample was related to personal variables, namely gender, type of teaching qualification and actual experience with teaching after graduation. Results demonstrate that male teachers (25%) tended to leave the teaching profession more readily than their female colleagues (13%). If the types of type of teaching qualification were compared, data showed that, on average, ten per cent of graduates in kindergarten/pre-primary education, eleven per cent of novice teachers in primary schools and 24 per cent of the secondary school teachers were not pursuing a teaching career (anymore). In each instance, the proportion of males leaving the teaching profession was higher than that of females (see Table 2).

An important distinction for the current study is the one between teachers who never entered the teaching profession after graduation ($N = 81$) and those that were employed as a teacher but decided leave the profession ($N = 154$). In total, 33 per cent of the respondents in our sample never worked as a teacher after graduation. The majority of participants (67%) started their career as a teacher but dropped out. Finally, as Table 3 shows, there were no significant differences according to gender between students who never started working as a teacher and those who did

Table 2
Attrition according to gender and type of teaching qualification.

Type of teacher education degree	Total number of attired teachers			Total number of respondents in sample			Percentage of attrition per background variable		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Kindergarten	2	44	46	8	465	473	25	9.46	9.73
Primary education	29	79	108	159	787	946	18.24	10.04	11.42
Secondary education	98	118	216	339	551	890	28.91	21.42	24.27
Total	129	241	370	506	1803	2309	25.49	13.37	22.91

($\chi^2(df = 1) = .14, p = .71$). However, a marginally significant relation with type of teaching qualification was found ($\chi^2(df = 2) = 6.06, p = .048$). Students with a teacher education degree in secondary education were overrepresented in the group of students that had never started working in teacher education. Teachers with a degree in primary education tended to leave the profession more often during the first five years of their career.

4.3. Motives for leaving the profession (RQ2)

As Table 4 demonstrates, the most salient reason was a lack of future prospects ($M = 1.66, SD = 1.31$). However, the higher standard deviation also points out that this reason did not apply equally to all respondents. Subsequently salient reasons were the workload teachers experienced ($M = .89, SD = .93$), job satisfaction and the relations with students ($M = .66, SD = .69$) and school management and support ($M = .60, SD = .73$). The least important reason for leaving the profession appeared to be the relation with parents ($M = .27, SD = .65$).

4.4. Relation between motives for attrition and actual experience after graduation (RQ3)

Finally, we investigated if the importance and nature of motives for attrition differed according to whether or not teachers actually had experience with the profession and whether or not this effect was significant after controlling for gender and type of teaching qualification.

The results of the multivariate general linear model presented in Table 5 indicate that is that having actual experience with teaching or not was a significant and relevant predictor in explaining variation in motives of attrition (Wilk's $\Lambda = .75; F(5, 226) = 15.00; sig = <.001$; partial $\eta^2 = .25$). It explained 25 per cent of variance in motives, indicating a large effect. In contrast, type of teacher training degree, although significant, only exerted a small to moderate effect (Wilk's $\Lambda = .88; F(5, 226) = 2.99; sig = .001$; partial $\eta^2 = .06$). The impact of gender was marginally significant and explained merely four per cent of the variance in motives (Wilk's $\Lambda = .96; F(5, 226) = 1.93; sig = .090$; partial $\eta^2 = .04$).

Hierarchical regression analyses were used to make a more fine-grained analysis of the relation between having actual experience

Table 3
Relation between personal variables, actual teaching experience and attrition.

		Experience		Total
		No	Yes	
Gender	Male	29 (33%)	59 (67%)	88
	Female	52 (35%)	95 (65%)	147
	Total	81 (35%)	154 (65%)	235
Type of teaching qualification	Kindergarten	8 (32%)	17 (68%)	25
	Primary	18 (24%)	57 (76%)	75
	Secondary	55 (41%)	80 (59%)	135
	Total	81 (35%)	154 (65%)	235

or not and specific motives. Results of these analyses are presented in Table 6.

Results for 'job satisfaction and relations with students' indicate that adding gender and type of teaching qualification to the model resulted in a significant improvement in R^2 (R^2 -change = .04, F -change (3, 231) = 3.27, $p = .02$). This was predominantly due to the factor 'type of teaching qualification'. A lack of job satisfaction appeared to play a more significant role in leaving the profession for teachers with a degree in secondary education as opposed to those with a degree in kindergarten/pre-primary education ($\beta = .33, t = 2.99, p = .003$). More importantly, adding the experience-factor to the model did not result in a significant improvement of the model (R^2 -change = 0, F -change (1, 230) = .03, $p = .86$). The total model explained seven per cent of the variance in this motive.

The R^2 change on the initial model for 'school management and support' proved non-significant, indicating that type of teaching qualification and gender played no significant role in explaining difference in this motive (R^2 -change = .02, F -change (3, 231) = 1.63, $p = .18$). Adding experience to the model, however, significantly improved the explained variance (R^2 -change = .12, F -change (1, 230) = 33.38, $p < .001$). The motive played a more important role for teachers who actually started a teaching career as opposed to those who did not ($\beta = .36, t = 5.78, p < .001$). The final model explained about thirteen per cent of the variance in this motive.

A model including gender and type of teaching qualification as predictors for 'Workload' explained significantly more variance compared to a model containing no predictors (R^2 -change = .06, F -change (3, 231) = 4.74, $p = .003$). Both gender and type of teaching qualification proved to be significant predictors. Workload was a stronger motive for female teachers ($\beta = .14, t = 2.99, p = .045$) and for teachers in primary education, compared to those in kindergarten/pre-primary education ($\beta = .29, t = 2.73, p = .007$). Adding experience to the model further improved it (R^2 -change = .03, F -change (1, 230) = 6.75, $p = .010$). Again, the motive was found to be more important for teachers with job-experience ($\beta = .17, t = 2.60, p = .010$). However, the final model only explained nine per cent of the variance in the motive.

When the 'future prospects' of teachers were considered as a motive, a significant relation with type of teaching qualification was observed. The prevalence of this motive was stronger for teachers with a degree in pre-primary education ($\beta = -.23, t = -2.09, p = .038$). Adding the two personal variables to the model, significantly improved the variance it explained (R^2 -change = .04, F -change (3, 231) = 2.85, $p = .038$). Adding experience further enhanced the model considerably (R^2 -change = .12, F -change(1, 230) = 33.25, $p < .001$). The significant predictive value of type of teaching qualification disappeared, leaving only experience as a significant predictor. In this case, again, the motive proved stronger for teachers with experience in the field ($\beta = .36, t = 5.77, p < .001$). The final model explained sixteen per cent of the variance in this motive.

Finally, regarding the factor 'relations with parents' our results demonstrated that a model including personal variables as

Table 4

Descriptive statistics for motives and subgroups according to gender, teacher education degree and experience.

	Total M(SD)	Gender M(SD)		Type of teaching qualification M(SD)			Experience M(SD)	
		Male	Female	Kindergarten	Primary	Secondary	No	Yes
Job satisfaction & relation students	0.66 (0.69)	0.66 (0.59)	0.66 (0.75)	0.34 (0.44)	0.60 (0.64)	0.75 (0.74)	0.67 (0.63)	0.66 (0.73)
School management & support	0.60 (0.73)	0.59 (0.81)	0.60 (0.68)	0.33 (0.38)	0.69 (0.71)	0.59 (0.78)	0.24 (0.42)	0.78 (0.79)
Workload	0.89 (0.93)	0.71 (0.80)	0.99 (0.98)	0.63 (0.93)	1.15 (0.92)	0.78 (0.90)	0.66 (0.77)	1.00 (0.98)
Future prospects	1.66 (1.31)	1.45 (1.27)	1.80 (1.32)	2.23 (1.11)	1.75 (1.26)	1.51 (1.26)	1.03 (0.91)	2.00 (1.36)
Relation with parent	0.27 (0.65)	0.25 (0.60)	0.27 (0.68)	0.01 (0.07)	0.45 (0.77)	0.21 (0.61)	0.03 (0.14)	0.39 (0.77)

predictors significantly outperformed a model containing no predictors (R^2 -change = .05, F -change(3, 231) = 3.70, p = .012). A significant impact of type of teaching qualification was observed. Students with a degree in primary education relied more on this motive in deciding whether or not to leave the profession, compared to students with a degree in pre-primary education (β = .32, t = 2.95, p = .004). The model was further improved by adding experience as predictor (R^2 -change = .06, F -change(1, 230) = 15.41, p < .001). Teachers with experience rated this motive as more important (β = .25, t = 3.93, p < .001). The final model explained about ten per cent of the variance.

5. Discussion and conclusions

Qualified teachers are expected to teach. However, several novice teachers never seek a teaching position or leave the teaching profession within five years of graduation. The current study explored differences in attrition according to the fact whether graduated teachers actually started teaching or not. To our knowledge, no studies have investigated differences in attrition from this research-perspective. We did not only look into attrition rates but also took a more warm approach by exploring motives for leaving the profession.

Regarding the question 'who attires?', results show that sixteen per cent of the graduates who were contacted in this research study did not teach (anymore). This percentage is in line with official statistics (Department of Education, 2013). Compared to other countries, where up to 50% of the qualified teachers change jobs (Darling-Hammond, 2000; Ingersoll, 2000; Kyriacou & Kunc, 2007; Purcell et al., 2005), exit attrition numbers in Flanders appear to be smaller. There might be various reasons for the lower attrition rate. First, the educational government in Flanders exerts a policy that regards teachers as emancipated, autonomous professionals, who are competent to teach, to assess and to scaffold their students throughout their educational career (Flemish department of Education and Training, 2008). This view which may be supportive of teachers' enthusiasm, fulfilment and motivation to teach. Second, there is an upcoming teacher shortage in Flanders. Consequently, becoming a teacher to a degree provides job security for young adults in times of economical crisis. This is partially evidenced by the rising number of students within all teacher education programmes over the last couple of years (Department of Education, 2013). This feeling of security might be heightened further by the policy of a possible permanent appointment after five years of experience.

Table 5

Multivariate model test.

Effect	Wilks' lambda	F	p	η^2
Intercept	.38	73.20	.000	.62
Gender	.96	1.93	.090	.04
Type of teaching qualification	.88	2.99	.001	.06
Experience	.75	15.00	.000	.25

Results regarding the link between attrition and our control variables gender and type of teaching qualification are consistent with most of the previous research (Boyd et al., 2005; Dolton & Von der Klaauw, 1995). Exit attrition is highest for males and secondary school teachers in our sample. It is striking that one out of three teachers who attired never started teaching. This group is largest in the category of teacher who prepared for a job in secondary education. The subject-specialty of these teachers possibly provides them with more opportunities, prospects and often better conditions for employment outside education (Stinebrickner, 1998). A complementary explanation might be that for a part of the students in the secondary school teacher track, teaching is considered as a fall-back career (e.g. Watt & Richardson, 2008). Consequently, a larger part of these students might choose not to pursue this career, despite graduating. It would be interesting to explore the motives for finishing their degree for this specific group into more detail in future research.

Based on 66 possible reasons for attrition, our analyses identified five overarching motives for exit attrition: 'job satisfaction and relations with students', 'school management and support', 'workload', 'future prospect' and 'relations with parents'. Most of these factors are in line with previous research or existing models on attrition. For instance, there seems to be considerable overlap between our dimensions and those identified by Kyriacou and Kunc (2007) more specifically regarding (1) supportive school management, (2) adequate time (seemingly an important factor in assessing workload) and (3) relationship with students. However, the final factor in their research, a happy personal life, did not surface as a separate factor in our study. In addition, several studies have pointed to the effect on exit attrition of aspects of the limited future prospects teachers, such as limited opportunities for career development and promotion (McCreight, 2000). In our study, the lack of future prospect was found to be the most salient reason for abiding a teaching career. Plausibly, many of the respondents, usually in their twenties, are building an independent adult lives. An insecure or part-time position might be viewed as insufficient to comply with these expectations and aspirations.

An important aim of our study was to provide a detailed account of (motives for) attrition by relating them to the fact as to whether or not teachers actually had experience working as a teacher. Adopting teacher experience as a predictor variable proved valuable as our multivariate analysis found it to be the strongest predictor of motives for attrition, explaining 25 per cent of the variance. This result certainly pleads for taking this factor into account in future research.

Subsequent analyses demonstrated that adding experience to the model significantly improved the explained variance of a model containing the control variables for four of the five motives. Especially in the case of school management and support and future prospects the added value was considerable (changes in R^2 of .12 in each case). In each instance, motives were found to be more important for teachers who initially started teaching, but left early afterwards. Only for 'job satisfaction and student relations' no significant differences between the two groups was found. We can

Table 6
Regression analyses with personal variables and actual experience or not as predictors and specific motives as dependants.

Scales Motive	Model with personal variables		Model incorporating experience					
	Gender	Primary education	Secondary education	R ²	Sig F-change df(3, 231)	Experience	R ²	Sig F-change df(1, 230)
Satisfaction and relations with students	<i>B</i> = .11 <i>t</i> = 1.08	<i>B</i> = .28 <i>t</i> = 1.78	<i>B</i> = .47 <i>t</i> = 2.99**	.04	3.27*	<i>B</i> = .02 <i>t</i> = .18	.04	.03
School management and support	<i>B</i> = .05 <i>t</i> = .34	<i>B</i> = .37 <i>t</i> = 2.21*	<i>B</i> = .28 <i>t</i> = 1.68	.02	1.63	<i>B</i> = .55 <i>t</i> = 5.78***	.15	33.38***
Workload	<i>B</i> = .26 <i>t</i> = 2.01*	<i>B</i> = .57 <i>t</i> = 2.73**	<i>B</i> = .28 <i>t</i> = 1.38	.06	4.74**	<i>B</i> = .32 <i>t</i> = 2.60**	.09	6.74**
Future prospect	<i>B</i> = .22 <i>t</i> = 1.20	<i>B</i> = -.44 <i>t</i> = -1.46	<i>B</i> = -.62 <i>t</i> = -2.09*	.04	2.85*	<i>B</i> = .98 <i>t</i> = 5.77***	.16	33.25***
Relations with parents	<i>B</i> = .01 <i>t</i> = .15	<i>B</i> = .43 <i>t</i> = 2.95**	<i>B</i> = .20 <i>t</i> = 1.39	.05	3.70*	<i>B</i> = .34 <i>t</i> = 3.93***	.11	15.41***

Legend: *significance between .05 and .01; ** significance between .01 and .001; ***<.001.

therefore state that, overall, similar motives apply to the two groups but in most cases to a different degree. At the same time, these findings also raise questions regarding the dominant motives for teachers who did not start teaching. More in-depth research would certainly be relevant.

A plausible explanation for our results might be the nature of the experience of students during their pre-service internships. In most cases, students are primarily focussed on their role as a classroom teacher during these internships, thus providing them with concrete experiences with job satisfaction and student relations. In contrast, they probably only came into contact with the impact of school management or parents to a lesser degree during their internship. Similarly, during internships the workload is controlled for students in order to maximize the learning experience. Finally, the experience of a limited prospect for a career does not apply to the context of an internship. Therefore it is not surprising that the saliency of the latter motives changes after starting a career, whereas that of job satisfaction and student relations does not.

Overall, we perceive the added value of our study as being twofold. First, it elucidates the phenomenon of attrition in a Flemish context. This provides an important addendum to the attrition literature, as it points out both generalizability as well as the context-specificity of motives for attrition. Despite the fact that most of the literature on early exit attrition is non-European (i.e. American and Australian), our conclusions regarding the primary motives for attrition seem to be in line with this literature (e.g. [Kyriacou & Kunc, 2007](#)), suggesting that there are similar, overarching motives in play ([Beltman et al., 2011](#)). How and why these motives apply however, seems to be more context-specific. Some of the result we uncovered can only be explained by the educational context in Flanders, such as the educational policy or the lack of stability in career during the first five years. This evidence of context-specificity can caution researchers and policy makers against overgeneralization of results from earlier work because it might neglect the specific context. In addition, evidence regarding attrition from other countries can provide researchers and policy makers with valuable alternatives.

A second added value of this study is the fact that it uncovered having actual experience with teaching or not as being a relevant factor in understanding the phenomenon of early exit attrition. To our knowledge no previous study targeted this distinction. Differences in saliency of various motives were observed according to the experience-factor and some preliminary hypotheses regarding why these differences exist were forwarded. In addition, new questions were raised, for instance regarding motives for teachers who never started teaching or the importance of teaching as a fallback career. Given the fact that our study was exploratory in

nature however, our results have to be replicated and further expanded on.

The present study also has limitations. In-depth analysis of what these motives for attrition really mean (and what lies beneath) cannot be achieved by questionnaire research alone. As such, complementary qualitative interviews with the teachers in this or other samples may add explanatory value to the results of the present study. In addition, the present study involved a survey, for which no broad, validated instruments were available at present. As such, factor analysis provided the only, but adequate, method to guarantee meaningful results. The instrument therefore needs to be administered and validated in other contexts to prove the validity of its' results. Finally, linking our instrument to existing valid and reliable instruments in the field (i.e. FIT-choice questionnaire; [Watt & Richardson, 2007](#)) could spur additional insights.

Important implications that derive from this investigation obviously concern ways of effectively dealing with exit attrition. Highly important frustrations on the part of the teachers that have quitted teaching within five years of graduation are the limited prospects for the future. In particular, the lack of continuation of their contracts, limited prospects for long-term employment or permanent positions and limited opportunities for career development and promotion, tend to be decisive reasons for exit attrition. As a consequence, novice teachers are often given difficult classes, annoying tasks, and have to prove themselves continuously in order to get recognition for their work and positive assessments in order to receive a permanent position, if available, in the long run. Alternatively, 'contracts for an indefinite periods' may offer a valid solution.

With respect to workload, teachers fare well with proper administrative support ([Borman & Dowling, 2008](#); [Darling-Hammond, 2003](#)). In fact, teachers who are offered administrative support, are less likely to resign ([Ingersoll, 2001](#)). In addition, structurally initiated initiatives may motivate teachers, such as mentoring programmes ([Buckley et al., 2005](#); [Smith & Ingersoll, 2004](#)) or financial rewards ([Borman & Dowling, 2008](#); [Feng, 2005](#)) could be introduced.

Finally, many teachers experience disappointment regarding expectations. As such, sufficient teaching practice during pre-service teacher education is necessary in order for teacher candidates to assess the (mis)match between what they believe the teachers' profession should ideally be and what reality provides ([Kyriacou & Kunc, 2007](#); [Stokking et al., 2003](#)). A good functioning mentor system may help novice teachers to deal with disappointed expectations and negative experiences and to see the bigger picture during their induction period. In addition, it might be fruitful to define internships more broadly and provide students with adequate experience in dealing with, for instance, parents or the

school management more early in their pre-service programme. Consequently, students may build a more realistic picture of what it means to be a teacher and may more readily decide to switch courses during education instead of deciding to leave the profession after graduation.

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