

**Preservice teachers' commitment to teaching
and the likelihood of retention in the
profession**

Teacher Education Advancement
Network Journal
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University of Cumbria
Vol 13(1) pages 100-113

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Abstract

Teacher education for primary and lower secondary school has received harsh criticism in many countries, also in Denmark. Teacher education programmes experience high dropout rates and has low appeal to potential students. The purpose of this study is to explore how preservice teachers' perceptions of campus experiences and field experiences are related to their prospective commitment to become a teacher as well as to their turnover intention. This focus is important because research indicates that prospective commitment to a profession is an important factor in sustaining good professional practices among preservice teachers as well as in preventing early exit from the programme. Structural equation modelling was used for the data analysis in this study. A survey was carried out with 1,435 participating Danish preservice teachers at four different campuses. The preservice teachers were asked to voluntarily complete a paper-based questionnaire after they had completed at least one teacher practice period. The analysis indicated that perceived relevance of subject didactics teaching and theory–practice interactions in the school-based section of teacher training are the most important elements in explaining both the prospective commitment of preservice teachers to their future profession as teachers and their turnover intention.

Keywords

preservice teachers; teacher education; Denmark; prospective commitment; turnover intention.

Introduction

Research indicates that prospective commitment to a profession is an important factor in promoting good professional practice (Bartlett, 2001). It is presumed that this factor also applies to teachers:

Good and effective teachers demonstrate intellectual and emotional commitment. ...This commitment is related to their sense of professional identity both as member of a larger community of teachers and as a member of the school and department which they have work. (Day, 2013:24)

Preservice teachers are not members of schools, but they usually have expectations about a future career as teachers when they start their initial teacher preparation (Sanger and Osguthorpe, 2011). Preservice teachers' commitment to become teachers expresses their prospective occupational identity, their passion for teaching, and expectations for their future lives as school professionals (Evans and Tribble, 1986). These aspects are "largely neglected in educational policy" (O'Connor, 2008:117). However, it can be expensive for society and for the individual preservice teacher when individuals who train to become teachers choose not to become teachers after the end of their course or leave the profession after few years (Watlington, Shockley, Guglielmino and Felsher, 2010). A high dropout rate during the course of teacher training is also a problem (Dove, 2004).

Citation

Elstad, E., Christophersen, K.A. and Turmo, A. (2021) 'Preservice teachers' commitment to teaching and the likelihood of retention in the profession', *TEAN journal*, 13(1), pp. 100-113.

The purpose of this study is to explore how Danish preservice teachers' perceptions of campus and field (school) experiences are related to their prospective commitment to become teachers as well as their turnover intentions. It is important to gain greater insight into what explains preservice teachers' prospective commitment and their decision not to complete the teacher education programme. More information about these factors may enable the initiation of appropriate measures to improve teacher training in Denmark.

The Danish context

Danish teacher education is divided into separate components: (1) 4-year teacher education for the compulsory primary and lower secondary schools, (2) teacher education for upper secondary, and (3) vocational education. This study examines teacher education for primary and lower secondary schools.

Teacher education at six university colleges has never been well regarded and has been reformed 10 times. The last reform took place in 2012, when the Danish parliament adopted a new reform for teacher education, which for the first time introduced an admission requirement for the education programme. In addition, the Danish education student must acquire adequate competences through the four-year programme with 240 ECTS (European Credit Transfer and Accumulation System). The programme is complex. First, preservice teachers must study 3 academic subjects on campus, one of which must be Danish or mathematics (120–140 ECTS). Second, preservice teachers must study "The teacher's foundational competences" (60 ECTS), which is divided into general educational theory (named 'educational theory'), subject didactics (Rasmussen and Bayer, 2014) and 'Christian studies/life enlightenment/citizenship'. The topic 'Christian studies/life enlightenment/citizenship' is not considered in this study. Third, the internship is an important part of teacher training (Cohen, Hoz and Kaplan, 2014) and is spread out periodically over the four years of the Danish teacher education programme. Preservice teachers are supervised by teachers at the practice schools. Information material is prepared regarding the campus-based content of teacher training, and guidelines regarding the conduct of supervision at the school are submitted to the supervisors. In addition, meetings are arranged between the university college's teacher educators and the practice supervisors to establish points of contact and mutual information. The internship or practicum (30 ECTS) consists of modules that the preservice teachers participate in over the course of the four-year programme. The internship takes place in ordinary *folkeskole* (primary and lower secondary school), and the supervisors are normally school teachers. The preservice teachers must pass the internship and take an oral internship test. In addition, the preservice teacher must prepare a written professional bachelor project based on a concrete problem, which must include results from a research and development project.

In Denmark, several reforms in teacher education have been carried out, including four since 1990 alone. A political agreement was reached in 2012 on reforming teacher education. The new programme came into force in 2013, but it was already being revised in 2015. The Danish Ministry for Higher Education and Science began an evaluation of the quality and relevance of teacher education in autumn 2017, with the results published in January 2019. Three months later, the authorities commissioned a new expert group to create novel models for how teacher education at 'a high international level' could be realised and to discuss how 'a more appropriate placement of teacher education' in universities and university colleges (as is the case at present) might be realised. This expert group's work was stopped in November 2020: Denmark now needs 'a broad boost in quality' (Bjerril, 2020).

However, with the reform(s) of teacher education, there followed a significant change in the relationship between the university college and schools regarding responsibility for the preservice teacher's teacher practice. Up until then, the university college was responsible for the quality and quantity of the teacher

practice, but after 2013, the school became an equal educational partner for implementing preservice teachers' three practice modules (Braüner and Hornbøll, 2014). As a result, the university college is still responsible for the overall quality of the teacher practice, but in cooperation with the schools. Since the reform, schools have been required to draw up a plan, which the university college must approve, for the content and structure of the preservice teachers' progress and outcomes within the three modules, using the competence goals for the modules as the basis for the assessment. The educators at the university colleges supplement the supervision provided by school staff and take part in the examination of the preservice teachers' reflections on their teaching practice module. Available resources for carrying out systematic contact between university college teacher educators and practice supervisors are, however, not extensive.

In 2018, an expert group was appointed to evaluate the revised teacher education programme. The evaluation of the expert group indicated that the quality and relevance of the revised programme is satisfactory with regard to several core elements, such as strengthened basic skills, use of competence goals, and strengthened internship. Similarly, according to the evaluation, the reform succeeded in making teacher training more relevant in relation to several key needs of teaching students, such as classroom management training (Danish Agency for Science and Higher Education, 2018). The reform was expected help to address the challenge of the high dropout rate (Bjerril, 2019). However, this has not happened.

The analysis of dropout rates indicates little change in the pattern of average dropout rates from the period 2006 to 2012. After the fourth year, 31.5% had quit (EVA, 2018). In addition, the number of primary school teachers fell by 15% from 2009 to 2017, while the number of primary school pupils dropped by only 5% during the same period (Ministry of Higher Education and Science, 2019). The proportion of teachers without teacher education has grown since 1997, from 8% to 18%. Predictions about future teacher coverage in Denmark show the number of primary school teachers will continue to decline until the year 2022. However, an excess of primary school teachers is expected in the period 2023–2030 (Lange-Group, 2017). One of the aims of the teacher education reform of 2012 was to make primary school teacher education more attractive. This has not happened, either: fewer and fewer of the best young people become teachers. At the same time, a significant proportion of those who were educated for the primary school teacher profession do not work in schools. Indeed, both the primary and lower secondary schools have difficulty retaining good teachers.

Danish authorities are not satisfied with the teacher education system that exists or with the dropout rates and lack of appeal to draw new students. This study explores how Danish preservice teachers' perceptions of campus experiences and field experiences are related to their prospective commitment to become a teacher as well as to their turnover intention. Prospective commitment refers to an attachment to becoming a teacher.

Theoretical framework

Commitment to one's occupation is important because an employee should have attitudes and motivation that are favourable for the purpose that their work should be serving (Bartlett, 2001; Khan, Ziauddin and Ramay, 2010). A preservice teacher's dedication to become a teacher is an example of such a commitment (Fresko, Kfir and Nasser, 1997; Lee, Zhang and Yin, 2011; Robinson, Hohepa, and Lloyd, 2009). It is difficult to envisage how all the situations that teachers are likely to experience during their years of teaching can be translated into clear instructions in curriculum guidelines and employment contracts. Unlike the quality-graded production of a strawberry picker, it is difficult to attain a precise measurement of the quality of a teacher's performance. Although an employer can gain an indirect

indication of a teacher's performance (Berliner, 2014), a teacher's professional judgment (Krogh-Jespersen, 2009) and work are not easily assessed by direct measurement.

Commitment to the teaching job and positive attitudes towards the teaching role are important premises for teacher professionalism (Firestone & Pennell, 1993). There are grounds to believe that preservice teachers, to a varying degree, possess a prospective commitment to their future role in teaching (Silverman, 2010; Klassen and Chiu, 2011; Chesnut and Cullen, 2014). Prospective commitment and turnover intention of preservice teachers may be strengthened or weakened due to experiences during teacher training, both in the campus-based components of the programme and during internships (Ng, Nicholas and Williams, 2010). Therefore, this study was designed to explore the strength of the associations between the campus-based and field experiences in teacher practice and preservice teachers' commitment to teaching and turnover intention. Teacher education consists of exchanges between campus courses for teaching subject didactics and educational theory (plus Christian studies/life enlightenment/citizenship) and school practice courses for supervised teaching practice. Several scholars believe that preservice teachers' perceptions of coherence between these exchanges are critical to prepare them for their roles as teachers (Grossman, Hammerness, McDonald and Ronfeldt, 2008). Our study is based on the premise that good campus and field teacher training experiences foster commitment to teaching and constrain turnover intention. The research conducted for this study is intended to prove or disprove several hypotheses related to this premise.

Hypothesis 1 states that perceived relevance of the educational theory course is positively related to Danish preservice teachers' prospective commitment to become a teacher. Hypothesis 2 states that perceived relevance of subject didactics courses is positively related to Danish preservice teachers' prospective commitment to become a teacher. The following theoretical expectations may be expressed: Hypothesis 3 asserts that perceived relevance of educational theory courses is negatively related to Danish preservice teachers' turnover intention, and Hypothesis 4 asserts perceived relevance of subject didactics teaching is negatively related to turnover intention.

Generally, preservice teachers are sent first to observe a teacher's lessons and then gain practice by teaching segments of or whole lessons (Kagan, 1992). A supervisor at the school will observe these teaching sessions (Smith and Lev-Ari, 2005), which are often followed by a supervision session between the supervisor and the preservice teacher(s) (Copland, 2010). Supervision before a lesson, where the preservice teacher discusses and justifies a lesson plan, is also normal practice. In addition, in Denmark peer supervision and supervision of groups are also standard procedures (Rasmussen 2014).

Field placement is positively related to preservice teacher retention (Ronfeldt, 2012). The content and method of supervision sessions in field placements vary, depending on the supervisor's professional view of supervision. Such supervision can partially be considered as personalised formative feedback (Zeichner and Teitelbaum, 1982) and partially as theory–practice interaction (Heggen and Terum, 2013). The first method emphasises a humanistic approach, where the supervision focuses on the preservice teacher's well-being and need of concrete advice on techniques and other strategies for mastery of teaching (Wang and Odell, 2002). However, the purpose of the internship is broader than this. Research shows that Danish university colleges try to bridge the gap between theory and practice (Laursen, 2015). As such, the aim of the internship is to create a link between theory and practice so that the preservice teacher acquires theoretically based practical skills in preparing, implementing, and evaluating teaching lessons.

Mastery of the theory–practice relation in professional programmes like teacher education should provide a fruitful challenge that inspires preservice teachers to learn by reflecting on practical experiences through

the lens of theoretically based concepts (Laursen, 2015). Supervisors are expected to help preservice teachers with this practical synthesis so the preservice teachers can better understand the practical relevance of the curriculum (Heggen and Terum, 2013). Supervision must, therefore, emphasise educative supervision with a bifocal perspective, for mentees to find supervision relevant in their classroom, which may be seen as both theory–practice interaction and personalised formative feedback. The preservice teachers' perceptions of the relevance of theory for the practical conduct of teacher's professional work (i.e., theory–practice interaction) will depend on whether the school's supervisors actually relate the content of their supervision to the basis of knowledge created in the campus-based part of the teacher training.

There are grounds to presume that preservice teacher practice might nurture the prospective commitment of preservice teachers to becoming teachers and might constrain turnover intention (Darling-Hammond, 2006). Hypothesis 5 states that theory–practice interaction is positively related to Danish preservice teachers' prospective commitment to become a teacher. The following theoretical expectation, which constitutes Hypothesis 6, may be expressed: theory–practice interaction is negatively related to Danish preservice teachers' turnover intention.

Providing personalised formative feedback during supervision might assist the preservice teachers' learning and could be helpful for coping with the challenges they will face as teachers (Ferguson, 2011). Hypothesis number 7 posits that providing formative feedback during supervision is positively related to the preservice teacher's prospective commitment to become a teacher. The following theoretical expectation is formulated (Hypothesis 8): Providing formative feedback during supervision is negatively related to turnover intention.

In summary, the following eight hypotheses are addressed:

1. Perceived relevance of educational theory teaching is positively related to Danish preservice teachers' prospective commitment to become a teacher.
2. Perceived relevance of educational theory teaching is negatively related to Danish preservice teachers' turnover intention.
3. Perceived relevance of subject didactics teaching is positively related to Danish preservice teachers' prospective commitment to become a teacher.
4. Perceived relevance of subject didactics teaching is negatively related to Danish preservice teachers' turnover intention.
5. Theory–practice interaction is positively related to Danish preservice teachers' prospective commitment to become a teacher.
6. Theory–practice interaction is negatively related to Danish preservice teachers' turnover intention.
7. Personalised formative feedback during supervision is positively related to Danish preservice teachers' prospective commitment to become a teacher.
8. Personalised formative feedback during supervision is negatively related to Danish preservice teachers' turnover intention.

Research methodology

In 2017, a survey was conducted involving Danish preservice teachers from four campuses of one university college. The four campuses differ in sizes and somewhat in organisation of the lectures. The preservice teachers were asked to voluntarily complete a paper-based questionnaire after their completion of at least one practice period. A total of 1,509 questionnaires were returned. 1,435

questionnaires were completed. In the questionnaire the preservice teachers were asked to recall to what extent they had experienced their on-campus studies as relevant during the practice period, what were their experiences like with their practice supervisors, and other relevant questions.

Table 1. Overview of constructs, abbreviations, and items, and 4 independent and 2 dependent variables. Response scale from 1 (strongly disagree) to 7 (strongly agree).

Independent variables:

Perceived relevance of educational theory teaching (abbreviated pp)

In educational theory teaching:

- I am given practical examples from actual teaching (w35)
- The connection between educational theory and practice is made clear (w38)

Perceived relevance of subject-didactics teaching (abbreviated sp)

In subject-didactics teaching:

- I am given practical examples from actual teaching (w39)
- I have become familiar with academic content that is relevant for the work of a teacher (w40)
- The connection between subject-didactic theory and practice is made clear (w42)

Theory-practice interaction (abbreviated is)

In the practice periods:

- I get to know how the study subject is relevant in school (w44)
- I discuss with my supervisors how the subject matter can be applied in developing the teaching practice (w45)
- I discuss practical experiences with the supervisors in light of what we have learned so far (w46)

Personalised formative feedback during supervision (abbreviated ss)

- Supervision meetings at the practice school help me to understand what I should do to improve as a teacher (w51)
- Supervisors at the practice school give me clear and direct feedback about where I stand (w53)
- Feedback from supervisors at the practice schools is in close accordance with what I have actually achieved (w54)
- Feedback from supervisors at the practice schools makes clear what is expected of me as a preservice teacher (w55)

Dependent variables:

Prospective commitment to become a teacher (abbreviated id)

- I feel attracted to become a teacher (w3)
- It feels good to think that one day I will be a teacher (w4)
- I am looking forward to working as a teacher (w5)

Turnover intention (abbreviated ti)

- If I find a well-paid job after my teacher training, I will not work as a teacher (w56)
- I often think about career possibilities other than become a teacher (w57)
- If I could go back and choose afresh, I would choose something other than teacher training (w58)
- Other careers are more attractive to me than become a teacher (w59)

Structural equation modelling was used to analyse the relationships between the variables (see Figure 1.). Structural equation modelling is suitable for confirmatory factor analysis and path analysis. The assessments of fit between the model and data were based on the following indices: root mean square error of approximation (RMSEA), normed fit index (NFI), goodness-of-fit index (GFI), and comparative fit index (CFI). A good fit is indicated by RMSEA < .05 and NFI, GFI, and CFI > .95; an acceptable fit is indicated by $05 < RMSA < .08$ and NFI, GFI, and CFI > .90 (Kline, 2005). The measurement and structural models were estimated with IBM SPSS Amos 22. The actual values reported in Figures 1 and 2 show acceptable fit. The *p*-value of 0.000 is good. The RMSEA value of 0.062 indicates an acceptable fit. An NFI value of .921 indicates an acceptable fit, a GFI value of 0.900 indicates an acceptable fit, and a CFI value of 0.960 indicates a good fit.

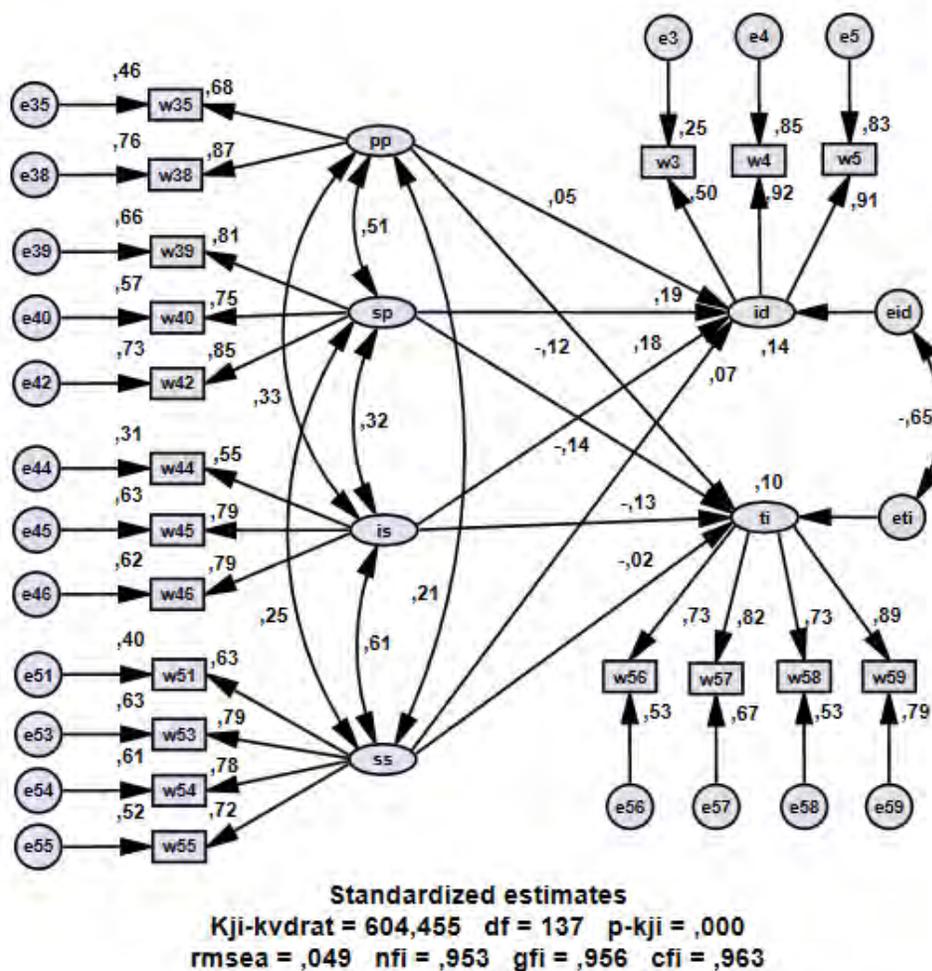


Figure 1. Structural equation model: Perceived relevance in educational theory teaching (abbreviated PP); perceived relevance in subject-didactics teaching (SP); theory–practice interaction (IS); personalised formative feedback during supervision (SS); prospective commitment to become a teacher (ID); and turnover intention (TI). N=1,435.

Table 2. Statistics for single items related to latent variables.

Latent variable	Item	Denmark: <i>N</i> = 1,435						
		Min	Max	Mean	SD	Skew	Kurt	Alpha
id	w3	1	7	5.52	1.14	-0.61	0.13	.81
	w4	1	7	5.61	1.28	-0.93	0.49	
	w5	1	7	5.79	1.25	-1.16	1.14	
ti	w56	1	7	3.32	1.90	.040	-0.98	.87
	w57	1	7	3.68	1.96	0.22	-1.19	
	w58	1	7	2.30	1.55	1.35	1.23	
	w59	1	7	2.75	1.70	0.89	-0.07	
pp	w35	1	7	4.48	1.38	-0.24	-0.39	.74
	w38	1	7	4.44	1.28	-0.26	-0.06	
sp	w39	1	7	4.64	1.38	-0.32	-0.34	.85
	w40	1	7	5.29	1.21	-0.63	0.24	
	w42	1	7	4.67	1.30	-0.38	-0.14	
is	w44	1	7	5.21	1.26	-0.58	0.16	.75
	w45	1	7	4.34	1.65	-0.24	-0.83	
	w46	1	7	4.66	1.63	-0.47	-0.57	
ss	w51	1	7	4.88	1.57	-0.57	-0.43	.82
	w53	1	7	4.43	1.72	-0.28	-0.89	
	w54	1	7	5.18	1.45	-0.84	0.24	
	w55	1	7	4.66	1.53	-0.48	-0.49	

Table 3. Summary of hypotheses and results.

Hypothesis	Wording	Results
1	Perceived relevance of educational theory teaching (pp) is positively related to Danish preservice teachers' prospective commitment to become a teacher (id).	The association ($b(pp \rightarrow id) = .05$) in model 1 is not significant and does not support the hypothesis.
2	Perceived relevance of educational theory teaching (pp) is negatively related to Danish preservice teachers' turnover intention (ti).	The association ($b(pp \rightarrow ti) = -.12$) in model 1 is significant and supports the hypothesis.
3	Perceived relevance of subject didactics teaching (sp) is positively related to Danish preservice teachers' prospective commitment to become a teacher (id).	The association ($b(sp \rightarrow id) = .19$) in model 1 is significant and supports the hypothesis.
4	Perceived relevance of subject didactics teaching (sp) is negatively related to Danish preservice teachers' turnover intention (ti).	The association ($b(sp \rightarrow ti) = -.13$) is significant and does support the hypothesis.
5	Theory–practice interaction (is) is positively related to Danish preservice teachers' prospective commitment to become a teacher (id).	The association ($b(is \rightarrow id) = .18$) is significant and does support the hypothesis.
6	Theory–practice interaction (is) is negatively related to Danish preservice teachers' turnover intention (ti).	The association ($b(is \rightarrow ti) = -.13$) in model 1 is significant and supports the hypothesis.
7	Personalised formative feedback during supervision (ss) is positively related to Danish preservice teachers' prospective commitment to become a teacher (id).	The association ($b(ss \rightarrow id) = .07$) is not significant and does not support the hypothesis.
8	Personalised formative feedback during supervision (ss) is negatively related to Danish preservice teachers' turnover intention (ti).	The association ($b(ss \rightarrow ti) = -.02$) is not significant and does not support the hypothesis.

Discussion

The purpose of this study was to explore how Danish preservice teachers' perceptions of campus and field experiences are related to their prospective commitment to become teachers as well as their turnover intentions. The structural equation modelling showed that preservice teachers' perceived relevance of educational theory teaching is not significantly associated with preservice teachers' prospective commitment to become teachers but is negatively and significantly related to turnover intention. This result indicates that perceived higher relevance of campus courses among preservice teachers could nurture their prospective commitment. This is an implication for practice.

The new campus courses related educational theory and subject didactics offered after the reform, as a result of a prior discussion of teacher education in Denmark, where the old educational theory courses

were criticised for being too normative and not connected to the educational practice in schools (Rasmussen 2008: 338). The new courses have less focus on theory of reflection and more focus on how theory can be applied to support the preservice teachers in their practical teaching, outcome-based competence goals. The components of educational theory and subject didactics have the potential of being perceived as relevant for teaching practice. Danish preservice teachers regard the relevance of these topics as quite high, actually, at the highest level for the educational theory course in teacher education programmes in the Nordic countries (Elstad, Christophersen and Turmo, 2020). In addition, outcome-based competence goals are closely connected to the feeling of perceived relevance of a subject, so it is interesting that the results indicate that preservice teachers' perceived relevance of educational theory teaching is not significantly associated with their prospective commitment to becoming teachers, as there has been a greater focus on relevance in the new reform.

On the other hand, the new teacher education reform emphasises use of national and international research "and experimental and innovative work relevant to become a teacher and suited to contributing to the development and application of new professional knowledge" (Ministry of Higher Education, 2015: 79). The educational authorities have supplied teacher education institutions with upgrading efforts for the teacher educators. However, research-adaption of teacher training is a double-edged sword. When teacher educators are first recruited and appointed to a university college, the expectations of the culture of Minerva's world could appear stronger than practice-related skills development. Also, publication in academic publications (and, preferably, in international journals) has a greater role in Danish university colleges than it formerly had, and far more teacher educators are now qualified as researchers (doctoral exams) than previously. Moreover, Danish teacher educators today feel pressure to make teacher education more research-oriented.

It is possible to increase the relevance of the educational theory course by training in the conduct of teaching carried out in the campus section of the teacher training programme. Micro teaching (Hatton and Smith, 1995; Aarsal, 2015) is an example, but also other efforts of linking theory and practice could be considered for the training of teaching skills required for preservice teachers before they begin as teachers in a school. Indeed, there is not an absolute distinction between campus experiences and practice experiences in teacher training. Developing the skill sets of teacher educators in the direction of the pragmatic relevance of teacher training, another option, is a controversial proposal, and an open question is whether a more instrumental, concrete approach for the planning, performance, and assessment of teaching could nurture preservice teachers' prospective commitment. However, such attempts at skill development are not necessarily sweet music to the ears of those who are 'true believers' in relation to the significance of research.

Additionally, the structural equation modelling showed that perceived relevance in subject didactics teaching is positively and significantly associated with preservice teachers' prospective commitment to become teachers and is negatively and significantly associated with turnover intention. The latest and last part of the evaluation of the teacher training programme showed that the preservice teachers found that the current education does not prepare them properly to, among other things, deal with conflicts with pupils and parents. Many schools have well-trained interns who take the assignments seriously and who are particularly chosen and particularly skilled at it, but there is great variation between the municipalities and the schools. In the Danish evaluation of teacher education, it was recommended that the teacher educators be given further university education in subject didactics (EVA, 2003:51). This has been accomplished over time via PhD grants and other measures. Subject matter didactics is currently integrated into the academic subjects in Danish programmes, and the average level of perceived relevance is quite high. One interpretation of the path coefficient reflected in the analysis is that subject didactics

teaching provides preservice teachers with valid knowledge about what will be useful in their teaching practice in a way that nurtures their prospective commitment.

Teacher training is not alone in having both a practice arena and a campus arena as parallel parts of a training regime. For instance, doctor training occurs both through university teaching and training in a hospital and other practice arenas. Doctor training, however, features a common professional language on campus and in the field. One factor that creates a special challenge for teacher training is that practice supervisors in the schools do not necessarily use the same professional language as that employed in institutional teacher-training campus teaching (Joram, 2007). In other words, there are often particular challenges in teacher training in terms of coherence and the integration between theory and practice in Denmark as well as in other countries. Although some improvement efforts on partnerships between university colleges and schools have been implemented in Denmark (Laursen, 2015), some challenges remain.

We investigated two strategies for the development of curriculum for field-based experiences in teacher training: personalised formative feedback and theory–practice interaction. The structural equation modelling showed that theory–practice interaction is positively and significantly associated with preservice teachers' prospective commitment to become teachers and negatively and significantly associated with turnover intention. On the other hand, personalised formative feedback is significantly associated with neither prospective commitment nor turnover intention. In the literature, formative feedback is considered a strong and effective communication tool if performed correctly (Svanes & Skagen, 2017). An implication might be that supervisors could be more supportive in their feedback. More and deeper collaboration between teacher educators at the university and school site coordinators could be a promising endeavour (Selland & Bien, 2014). Another strategy could be supervisor education. Although ECTS-rewarded supervisor education is not common in Denmark, it is in other countries (for instance, in Norway), where the courses are quite popular. This could be a useful policy in Denmark.

The results of this study should be considered against the background of deeper problems in the Danish society. A large majority of lower secondary teachers in Denmark do not perceive becoming a teacher as being valued in society (OECD, 2017). A stronger status of teachers and supervisors in teacher training could be helpful. In addition, an expanded understanding of the practice supervisor's role within the curriculum of teacher training could support the endeavour of research-based professionalism. Today, the teacher training programme for "Folkeskolen" is a four-year programme. However, a five-year teacher education programme has been discussed. A possible research thesis similar to the requirement for the Finnish teacher training programme could strengthen teachers' research-based professionalism. This has been the central mission of teacher education in Finland since the mid-1970s (Westbury, Hansén, Kansanen and Björkvist, 2005). A five-year master programme might give more latitude to research-based professionalism among Danish teachers, but the question of five-year teacher education is not the current policy.

As with all similar studies, our study confronted certain limitations from a methodological standpoint (for instance, a cross-sectional approach), as well as from a conceptual perspective (for instance, parsimonious modelling). We acknowledge these limitations and argue that they contribute to a foundation for future studies. It should be emphasised that relatively little quantitative research has been carried out in relation to preservice teachers' prospective commitment to teaching and turnover intention; therefore, we do not have a solid foundation of empirical related research. Another limitation is the use of self-reported questionnaire data. The subjective component of such data is undeniable. Independent judgments can provide interesting data about an employee's performance, but it is difficult to carry out this process

whilst honouring promises of anonymity. A further limitation is that we did not have an opportunity to couple preservice teachers' self-reporting with objective performance-related goals.

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