Motivation to become a teacher and its relationships with teaching self-efficacy, professional commitment and perceptions of the learning environment

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ABSTRACT

With the present study we provide insight into the change that is and is not present after a year of teacher training in 58 pre-service teachers’ motivation to become a teacher, their professional commitment, and their self-efficacy. Furthermore, the extent to which these changes are related to these teachers’ perceptions of their learning environment, specifically their perceptions of the quality of curriculum, instruction, and assessment was investigated. These pre-service teachers completed a survey at the beginning and end of their teacher training. Their self-efficacy regarding their tasks within the broader school context significantly decreased during their training period. The pre-service teachers’ change in teachers’ motivation, professional commitment, and self-efficacy appeared to be unrelated to these teachers’ perceptions of their learning environment.
Motivation to become a teacher and its relationships with teaching self-efficacy, professional commitment and perceptions of the learning environment

1. Introduction

The Netherlands is facing a shortage of teachers. Dutch politics have acknowledged this as a serious problem, yet implemented actions have not succeeded in countering the shortage (Ministry of Education, Culture, and Science, 2007a). According to Sinclair, Dowson, and McInerney (2006) and the Ministry of Education, Culture, and Science (2007), understanding teachers’ motivation for teaching is essential to understand how prospective teachers can be attracted and retained. Sinclair et al. (2006) furthermore state it is important to attract students with the “right” motives; these students will be more engaged and committed to their training and profession.

However, at most institutes for teacher training in the Netherlands, the preservice teachers are not selected based on their motivation to become a teacher. In the best case, preservice teachers may enter the training programme with the right motives, however in the worst case they may enter with the “wrong” motives. During teacher training these preservice teachers experience many facets of the teaching profession and we think that their motivation to become a teacher may change over time. This change over time may even be a consequence of the teacher training programme. It is this latter aspect that we are particularly interested in. What are the influences of the teacher training programme in promoting a change in motivation to become a teacher, especially when it concerns the change from a “wrong” to a “right” motive? Furthermore, we are interested in how pre-service teachers’ motivation to become a teacher is related to their commitment, as proposed by Sinclair et al. (2006) and these teachers’ self-efficacy beliefs (Rots, Aelterman, Vlerick, & Vermuelen, 2007). Before investigating these relationships, we first need to know if the pre-service teachers’ motivation to become a teacher, as well as their commitment and self-efficacy, do indeed change over the course of their year of teacher training. This study therefore aims to investigate the changes in motivation to become a teacher, their self-efficacy, and professional commitment. Furthermore, we are interested in the relationship with pre-service teachers’ perception of the quality of their learning environment.

1.1. Conceptual framework

Motivation is mostly perceived as that what starts, sustains and concentrates behaviour (Locke & Latham, 2004; Sinclair et al., 2006; Steers, Mowday, & Shapiro, 2004). Latham and
Pinder (2005) refined the definition of motivation further for the concept of work motivation. They define work motivation as “a set of energetic forces that originate both within as well as beyond an individual’s being, to initiate work-related behaviour and to determine its form, direction, intensity, and duration” (p. 486). Here, motivation is viewed as such an energetic force as well. Our conceptual framework stems from the perspective of the Factors-Influencing-Teaching (FIT) choice theory (Watt & Richardson, 2007) regarding teachers’ motivation to become a teacher. The literature on motivation to become a teacher generally distinguishes three types of motives (Bastick, 2000): intrinsic motives, extrinsic motives and altruistic motives. Watt & Richardson (2007) developed a more detailed theoretical model and specified five constructs that are important to the decision to become a teacher: a) prior teaching and learning experiences, b) perceptions of the task, c) perceptions of one’s abilities, d) values, and e) teaching as a fallback career. The FIT Choice theory is used here to investigate the change in pre-service teachers’ motivation to become a teacher over the course of one year of teacher training. Additionally, it is investigated how these changes are related to pre-service teachers’ perceptions of their learning environment. Perceptions of a high quality of curriculum, instruction and assessment have been believed to be beneficial to learning outcomes (Wilson, Lizzio, & Ramsden, 1997). For example, Slavin (1995) mentioned that the higher the quality of instruction, the more the information presented makes sense and the more easily it is remembered and applied. How these perceptions are related to pre-service teachers’ – change in – motivation to become a teacher is still unclear.

We extend the FIT Choice theory with Meyer, Allen, and Smith’s (1993) ideas on professional commitment. Teachers’ commitment to their profession has been defined as: “a psychological link between a person and his or her occupation that is based on an affective reaction to that occupation.” (Lee, Carswell, & Allen, 2000; p.800). Meyer et al. (1993) distinguished three factors of professional commitment: ‘affective commitment’ (commitment in terms of positive emotions towards the profession and a strong desire to remain in the profession), ‘normative commitment’ (commitment in terms of the feeling of obligation to remain in this profession), and ‘continuance commitment’ (commitment in terms of being aware of the costs of leaving the profession). Specific relationships between teachers professional commitment as operationalized by Meyer et al.’s (1993) factors and teachers’ motivation for teaching have only been speculative (Meyer, Becker, & Vandenberghge, 2004). Furthermore, the relationship between the quality of the learning environment and pre-service teachers’ professional commitment has mostly been investigated by using pre-service teachers’ intention to remain in the teaching profession as a measurement for their
professional commitment at one point in time during their teacher training (e.g., Huang & Waxman, 2009; Rots, Aelterman, Vlerick, & Vermeulen, 2007). Thus, whether pre-service teachers’ professional commitment, as operationalized by Meyer et al.’s (1993) factors, changes during the course of their teacher training remains unclear. How this change might be related to the pre-service teachers’ perception of their learning environment is remains unclear as well.

Similar remarks hold for teachers’ self-efficacy beliefs. Teachers’ self-efficacy concerns teachers’ beliefs about their capacity for bringing about the desired learning outcomes even when pupils are difficult or unmotivated (Tschannen-Moran & Woolfolk Hoy, 2001). Bandura (1993) refers to self-efficacy beliefs as playing a key role in motivational processes. Self-efficacy is often described as being a component of motivation and has been used in some studies as a measurement for the motivation construct (cf. Ciani, Summers, & Easter, 2008). Self-efficacy is related to behavioural changes, often through its effect on motivation. How pre-service teachers’ self-efficacy changes during their teacher training remains unclear, because although research exist about these teachers’ self-efficacy (e.g., Rots, et al., 2007), little longitudinal research has been performed. Again, the influence of teacher education on teachers’ self-efficacy has been investigated as well, but how pre-service teachers’ perception of their learning environment effects the change in their self-efficacy remains unclear.

To summarise, Figure 1 illustrates our conceptual model. With the present study we aim to provide insight into the change that is or is not present after a year of teacher training in pre-service teachers’ motivation to become a teacher, their professional commitment, and their self-efficacy. Furthermore, we investigate the extent to which these changes are related to these teachers’ perceptions of their learning environment, specifically their perceptions of the quality of curriculum, instruction, and assessment.
2. Method

2.1 Survey

Data were collected at the beginning and end of a Dutch university-based teacher training programme as a part of a longitudinal project. The pre-service teachers’ motivation to become a teacher was measured by a Dutch version of the FIT-choice questionnaire (Watt & Richardson, 2007). Participants indicated on a seven-point Likert scale the extent to which they believe the 37 stated motives (e.g., ‘As a teacher I will have long holidays’) are important. Furthermore, participants were asked to indicate their agreement with 13 statements about the teaching profession (e.g., ‘Teaching is a respected profession’, or ‘teaching is a well paid job’).

The pre-service teachers’ self-efficacy was measured by Friedman and Kass’ (2002) questionnaire. This questionnaire consisted of two scales containing, in total, 33 statements about the participants’ classroom skills (e.g., ‘I think I can be very creative in my work with pupils’) and their skills in the broader school context (e.g., ‘I believe I enjoy a good rapport..."
with the administrators at school’). The participants indicated the extent to which the statements applied to them on a six-point Likert scale.

By use of an adaptation of Meyer et al.’s (1993) questionnaire, the pre-service teachers’ professional commitment was measured. The questionnaire exists of three scales, measuring affective, normative, and continuance commitment, each containing six statements (e.g., ‘I am proud to be in the teaching profession’, ‘I feel a responsibility to the teaching profession to continue in it’, or ‘changing professions now would be difficult for me to do’). Participants indicated on a seven-point Likert scale how much they agreed with the statements.

The pre-service teachers’ perspectives of their learning environment was measured with the scales ‘good teaching’, ‘generic skills’, and ‘appropriate assessment’ of the course experience questionnaire (CEQ). The CEQ was developed by Ramsden (1991) and has proven to be valid and reliable for many samples of students in British and Australian higher education (e.g. Grebbenikov & Skaines, 2008). The pre-service teachers indicated their agreement to statements in these scales (e.g., ‘The teaching staff worked hard to make their subjects interesting’, ‘The course helped me develop my ability to work as a team member’, and ‘Too many teachers ask me questions only about facts’ respectively) on a five-point Likert scale.

2.2 Participants

A total of 187 pre-service teachers were asked to complete the online survey one month after starting their teacher training. Each participant was sent an e-mail including a personalized link with which the participant could start the survey. A sample of 147 pre-service teachers completed the survey at the beginning of the year (T1). At the end of the training programme (T2) all pre-service teachers were asked, using the same procedure as at T1, to participate. At T2, 65 pre-service teachers completed the survey. A total of 58 pre-service teachers completed the survey at both T1 and T2. These teachers’ data were used for further analysis. Of these teachers, 24 (41.4%) are men and their average age at the start of their training was 26 years (SD = 6.38, Range = 20-46).

2.3 Data-analysis

To investigate whether the pre-service teachers’ motives for becoming a teacher, their professional commitment, and their self-efficacy change significantly during one year of teacher training a paired samples t-test was used. Correlation analysis was used to investigate
the extent of the relatedness of the pre-service teachers’ perception of their learning environment and these teachers’ motives, professional commitment, and self-efficacy at T2.

3. Results
As becomes apparent from Table 1, of the five constructs that are important to the decision to become a teacher, the pre-service teachers rated, both at T1 and T2, motives related to their expectations of their ability as most important. Least important to the pre-service teachers, again both at T1 and T2, are motives related to teaching as a fallback career. No significant differences were found between the importance of these motives at T1 and T2. This implies that the motives that were important for the pre-service teachers’ at the beginning of their training are still important to them at the end of their training. Likewise, motives that were less important to these teachers remained less important after having received teacher training.

Of the professional commitment scales, the pre-service teachers rated their affective commitment highest at T1 and T2. The pre-service teachers’ main score on the professional commitment scales at T2 indicate a decrease in commitment, yet these differences were not significant. Thus, the pre-service teachers are, at the end of their teacher training as committed to their profession as they were at the beginning of their teacher training. These teachers’ positive emotions towards their profession (affective commitment), their sense of obligation to remain in the occupation (normative commitment), and their awareness of the costs associated with leaving the occupation (continuance commitment) remained stable over the course of their teacher training year.

The self-efficacy of the pre-service teachers regarding classroom activities remained stable and highest over T1 and T2. With their classroom self-efficacy rated highest compared to their school self-efficacy, these teachers feel, thus, more confident in their ability to perform required professional tasks and to regulate relations involved in the process of teaching and educating students than in their ability to perform organizational tasks, become part of the organization and its political and social processes. The pre-service teachers’ self-efficacy regarding these school-wide activities decreased significantly ($t = 4.16, df = 56, p < .001$) after their year of teacher training. They felt less confident in preforming organizational tasks and interact with, for instance, school administrators.
Table 1: Pre-service teachers’ mean scores on T1 and T2 on the motivation, commitment, and self-efficacy scales.

<table>
<thead>
<tr>
<th></th>
<th>Mean T1</th>
<th>Mean T2</th>
<th>Mean difference T1-T2</th>
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</thead>
<tbody>
<tr>
<td><strong>Motivation</strong></td>
<td></td>
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<tr>
<td>Prior teaching and</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>learning experiences</td>
<td>2.78 (.104)</td>
<td>2.78 (.103)</td>
<td>-.00 (.18)</td>
</tr>
<tr>
<td>Perceptions of the task</td>
<td>4.43 (.46)</td>
<td>4.44 (.47)</td>
<td>-.01 (.07)</td>
</tr>
<tr>
<td>Perceptions of one’s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>abilities</td>
<td>4.97 (.103)</td>
<td>4.96 (.104)</td>
<td>.01 (.15)</td>
</tr>
<tr>
<td>Values</td>
<td>4.25 (.64)</td>
<td>4.25 (.64)</td>
<td>.00 (.06)</td>
</tr>
<tr>
<td>Teaching as a fallback</td>
<td></td>
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<tr>
<td>career</td>
<td>2.27 (.118)</td>
<td>2.24 (.114)</td>
<td>.03 (.22)</td>
</tr>
<tr>
<td><strong>Professional</strong></td>
<td></td>
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<tr>
<td>commitment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective commitment</td>
<td>5.23 (.96)</td>
<td>5.01 (1.42)</td>
<td>.14 (.84)</td>
</tr>
<tr>
<td>Normative commitment</td>
<td>2.40 (1.06)</td>
<td>2.20 (1.19)</td>
<td>.08 (.40)</td>
</tr>
<tr>
<td>Continuance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>commitment</td>
<td>2.63 (1.35)</td>
<td>2.42 (1.41)</td>
<td>.08 (.43)</td>
</tr>
<tr>
<td><strong>Self-efficacy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom</td>
<td>4.01 (.53)</td>
<td>4.01 (.53)</td>
<td>.00 (.09)</td>
</tr>
<tr>
<td>School</td>
<td>3.57 (.59)</td>
<td>3.28 (.87)</td>
<td>.23 (.41)*</td>
</tr>
</tbody>
</table>

* *p < .001
Note: standard deviations are given between brackets.

The pre-service teachers’ average score on the good teaching scale of the CEQ was 4.03 (SD = .68), well above the neutral score scale of 3. This indicates that these pre-service teachers experienced practices such as being provided with feedback, being motivated by their teachers, well explained content. Their average score on the generic skills scale was lower, namely 3.20 (SD = .90). This indicates that the pre-service teachers have an almost neutral stance towards the extent to which their teacher training adds to the generic skills a graduate might be expected to possess. The average score on the appropriate assessment scale of the CEQ was 1.83 (SD = .73). This score shows that the pre-service teachers are not satisfied with the academic assessment they received during their training.
No significant correlations \((p > .05)\) were found between teachers’ change in their motivation, professional commitment, or self-efficacy and the pre-service teachers’ ratings of good teaching received during their training, the generic skills taught during the training, or the academic assessment of their training. This indicates that the pre-service teachers’ perceptions of their learning environment are not related to a change in their motivation during their year of teacher training. Neither are their perceptions of their learning environment related to a change in their professional commitment and self-efficacy between the start and the end of their year of training.

As the change in the pre-service teachers’ motivation, professional commitment and classroom self-efficacy was not significant, we investigated the extent to which these teachers’ perceptions of their learning environment would be related to their motivation, professional commitment and self-efficacy at the end of their year of teacher training. Results revealed that the pre-service teachers’ ratings of the good teaching scale and the generic skills scale were unrelated to teachers’ motivation, professional commitment, and their self-efficacy at the end of their year of training. These teachers’ ratings of the academic assessment during their training related significantly to teachers’ motivation based on prior learning and teaching experiences \((r = .30, p < .05)\) and teachers’ motivations based on teaching as a fallback career \((r = .32, p < .05)\). This implies that the importance of these types of motivation at the end of these teachers’ training is positively related to teachers’ ratings of their academic assessment at the end of their teacher training.

4. Discussion
We investigated if and how pre-service teachers’ motivation for the teaching profession changed during the year in which they received their teacher training. It was found that the pre-service teachers’ motives did not significantly change over the course of the year. Likewise, we investigated the possible change in these teachers’ professional commitment and their self-efficacy beliefs. No significant changes were found in the pre-service teachers’ professional commitment or classroom self-efficacy. Nevertheless, the trend of the change was negative in all cases, suggesting a decrease in all motivational constructs, as well as a in these teachers’ professional commitment and classroom self-efficacy. The single significant change was found in the pre-service teachers’ self-efficacy regarding their activities in the broader school context (e.g. their interaction with school administrators). Their self-efficacy regarding their functioning in the school context decreased significantly from the start of their teacher training to the end of their training.
A possible explanation for the negative trend in the pre-service teachers’ motivation, professional commitment, and classroom self-efficacy could lie in the reality shock these teachers sometimes report. Starting their profession, teachers have a certain perspective on what teaching entails. These perspectives are not always in line with reality. This gap between the ideas pre-service teachers have about teaching and their experiences in the field has been emphasized elsewhere as well (e.g., Flores, 2006). Generally, this gap has a negative connotation as it often results in a decline in the level of motivation for the profession. The observed trend was, nevertheless, not significant. Still, differences could have been present during the course of the year. Although we questioned these pre-service twice, it was at the beginning and end of the year. How teachers would have completed the survey at, for instance, the middle of their year of training remains unclear. More frequent measurement would be informative, but, in that case, the questionnaire should be shortened to minimize the load of the questionnaire on the pre-service teachers.

The decrease in the pre-service teachers’ self-efficacy beliefs regarding their work in the broader school context was found to be significant. This could relate to the aforementioned gap between teachers’ beliefs before they start their training and their experiences when finally working in the field. They may have been too optimistic regarding the possibilities of functioning in the broader school context. In reality they may find it far more difficult to interact with school administration or to make contact with other teachers, due to bureaucracy or an already existing close network of teachers. It has been found that communal organization is one of the predictors of teachers’ classroom self-efficacy (Lee, Dedrick, & Smith, 1991). Furthermore, community support has been found to significantly contribute to explaining self-efficacy beliefs of novice teachers (Tschannen-Moran & Woolfolk Hoy, 2007). The reduction in the pre-service teachers’ self-efficacy regarding the broader school context is therefore concerning. This could lead to a reduction in their classroom self-efficacy as well.

No significant relationships were found between the pre-service teachers’ perceptions of their learning environment and the change in their motivation, professional commitment, or self-efficacy. This finding could be due to the not significant differences between the measurements at T1 and T2. As there was almost no change, the correlation between the measurements are small as well. The analysis using only data gathered at T2 indicated similar results, implying no significant relationship between these variables. This means that even pre-service teachers who do not feel committed or efficacious do not change their feelings as a result of their perception of their learning environment. What is, nevertheless, the extent to
which attention is being and should be paid in teacher training to these issues? Should teacher training focus more on stimulating pre-service teachers’ motivation, professional commitment and self-efficacy, or should teacher training focus on instructional tips and tricks?

The question arises whether motivation, professional commitment, and self-efficacy are able to be influenced by university based teacher training. The pre-service teachers’ perceptions of the school in which they have their first teaching experience may influence these teachers’ ratings of their motivation, commitment, and self-efficacy more than their perceptions of their training at their university. This calls for an expansion of the present study by including pre-service teachers’ perceptions of their school as learning environment.

Other possibilities for further research exist as well which are related to the limitations of this study. This study was carried out with pre-service teachers from a single teacher training institution. It would be interesting to ask pre-service teachers from multiple teacher training institutions about their course experience. This may result in even more diverse responses as these teachers’ training will differ. This will give a further indication of the relevant aspects of teacher training for pre-service teachers’ motivation, professional commitment, and their self-efficacy beliefs.

Additionally, only university based pre-service teachers were part of the sample in this study. Most teachers in the Netherlands obtain a teaching certificate through other levels of teacher education (Ministry of Education, Culture, and Science, 2007b). Expanding this study with data from pre-service teachers receiving their training at different types of institutes would be informative for the possibilities and limitations for generalizing the present findings. Expanding the research would contribute to the study’s sample size as well. The present sample is limited to 58 pre-service teachers.

More research is necessary in this field as questions remain on the influence of – various forms of – teacher training on teachers’ motivation, professional commitment, and self-efficacy.
References


