



European Journal of Teacher Education

Publication details, including instructions for authors and
subscription information:

<http://www.tandfonline.com/loi/cete20>

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Available online: 19 Dec 2011

To cite this article: Rune Høigaard, Rune Giske & Kari Sundsli (2011): Newly qualified teachers' work engagement and teacher efficacy influences on job satisfaction, burnout, and the intention to quit, *European Journal of Teacher Education*, DOI:10.1080/02619768.2011.633993

To link to this article: <http://dx.doi.org/10.1080/02619768.2011.633993>



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Newly qualified teachers' work engagement and teacher efficacy influences on job satisfaction, burnout, and the intention to quit

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Teacher policy is high on national agendas and countries are seeking to improve schools. Demands on schools and teachers are more complex and it is expected that a larger number of teachers will enter the profession. Studies indicate that the period when teachers are newly qualified is a peak time for leaving the profession. The purpose of this study was to investigate work engagement and teacher efficacy and their relationship to job satisfaction, burnout and the intention to quit among newly qualified teachers. 750 questionnaires were distributed to teachers who had less than six years experience as a teacher after they had completed their teacher education from one university in southern Norway. 192 completed surveys were returned, a response rate of 25.6%. In line with the hypothesis, proposed work engagement and teacher efficacy are positively related to job satisfaction but negatively related to job burnout and the intention to quit. Practical implications of these findings are discussed.

Keywords: teacher efficacy; work engagement; job satisfaction; burnout; intention to quit

Introduction

Several studies over the past four decades have revealed that adverse job characteristics may have a deep impact on feelings of exhaustion and negative attitudes toward work. Research has shown that work overload, lack of autonomy, emotional demands, low social support and role ambiguity can lead to stress and burnout (for reviews, see Chang 2009; Schaufeli and Enzmann 1998; Lee and Ashforth 1996). Even if many teachers are fond of their job and experience little strain, several surveys have documented that up to a third of the teachers consider teaching as highly stressful (Borg and Falzon 1989). It should be noted that regardless of high levels of stress most teachers, at least 60–70%, experience teaching as rewarding and satisfying (Borg and Falzon 1989). A regression analysis of sources that create teacher stress reveal that workload, student misbehaviour, lack of professional recognition, lack of classroom resources and poor colleague relations are predicting variables (Boyle et al. 1995). Among newly qualified idealistic teachers it is suggested that pupils' disruptive behaviour destabilised work engagement (Serow 1994). In line with this, research has also indicated that the attrition among teachers increases after years in school. Comparing attrition rates among teachers in different countries

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shows, however, a wide variation, and in some countries it seems that the attrition rate is increasing (OECD 2005). Among teachers in North America and Europe, job satisfaction and teachers' desire to stay in the occupation dropped dramatically from the 1970–1990s (Perie and Baker 1997) and seems to be coherent with the attrition rate. More recently, attrition among novice teachers seems to have increased (Shakrani 2008). Research studies in North American school districts have established that approximately 40–50% of teachers exit the profession within their first five years of teaching (Ingersoll and Smith 2003). Obviously, there may be several reasons for this trend, such as more mobility and increased possibility for teachers to take different jobs, and this may amplify the decrease in commitment to their original educational choice, or first teaching position. Another way of explaining this attrition may be that newly qualified teachers are not adequately prepared, theoretically, practically or mentally, for the overwhelming newly qualified teacher shock. In order to prepare or empower novice teachers for their professional job, it is imperative to understand more about teachers' first experiences and the factors that may influence their decision and likelihood to quit teaching.

Job satisfaction is the result of employees' perception of how well their job provides those things that are viewed as important by them and studies indicate that job satisfaction influences teachers' enthusiasm (Weiqi 2007) and teachers' relations to students (van den Berg 2002), both of which could reasonably be suggested as factors that could influence a teacher's decision to quit teaching. In addition to investigating job satisfaction and the intention to quit, we will also study teacher efficacy and work engagement in relation to burnout symptoms (i.e., a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding) and the intention to quit.

Teachers' efficacy can be defined as teachers' beliefs about their ability to influence student outcomes (Wheatley 2002) or their beliefs in their ability to have a positive effect on student learning (Ashton 1985). According to Bandura (1986), teachers' beliefs in their efficacy affects their general orientation toward their educational process and their specific instructional activities. Teachers with low efficacy are associated with strict regulations and negative sanctions to get students to study and are generally pessimistic about students' ability to improve. Teachers with high efficacy seem to (a) be more open to new ideas and are more willing to experiment with new methods (Berman et al. 1977; Guskey 1988; Stein and Wang 1988); (b) exhibit greater levels of planning and organisation (Allinder 1994); (c) display greater enthusiasm for and commitment towards teaching (Allinder 1994; Coladarsi 1992); (d) be less critical of students when they make errors and work longer with students who are struggling (Ashton and Webb 1986; Gibson and Dembo 1984); and (e) experience a greater number of teacher flow experiences (Basom and Frase 2004). There is also research indicating that teachers with low perceived efficacy are the ones most likely to drop out of the profession (Glickman and Tamashiro 1982). Furthermore research has shown that there is a connection between teaching efficacy and burnout. Teachers with low teacher efficacy seem to cope by avoiding dealing with academic problems while teachers with high perceived efficacy direct their efforts at resolving their problems. Teachers with low efficacy turn their efforts inward to relieve their emotional distress and are coping by withdrawal, which heightens emotional exhaustion, and depersonalisation (Bandura 1997). Not surprisingly Leung and Lee (2006) found that the exhaustion dimension of burnout predicted teachers' intention to leave the profession.

The concept of work engagement is defined as a positive, fulfilling, work related state of mind that is characterised by vigor, dedication and absorption (Schaufeli et al. 2002). *Vigor* and involvement is characterised by high levels of energy and willingness to invest effort in one's work, while *dedication* is expressed by a sense of significance, enthusiasm, pride and inspiration. *Absorption*, the third defined characteristic of engagement, is described as being completely concentrated and happily engrossed in one's work. Studies have shown that work engagement is positively related to both individual classroom performance (Bakker and Bal 2010) and teachers' organisational commitment (Hakanen, Bakker, and Schaufeli 2006). Recent research also suggests that vigor and dedication are the opposite poles of the burnout dimensions exhaustion and cynicism (Gonzalez-Roma et al. 2006), and results indicate that Australian primary teachers score significantly higher on dedication and absorption compared to high school teachers (Timms, Graham, and Cottrell 2007).

Previous studies relating teacher efficacy and work engagement to work burnout, job satisfaction, and the intention to quit in the teaching profession have, however, not focused their attention towards newly qualified teachers, who are identified as being most at risk in quitting the profession. The purpose of this study, therefore, was to inquire into the impact of these potential predictor variables on job satisfaction (i.e., the degree to which they like their job), burnout and the subsequent intention to quit in recently qualified teachers.

- H1: Teacher's efficacy and work engagement are negatively related to job burnout.
- H2: Teacher's efficacy and work engagement are positively related to job satisfaction.
- H3: Teacher's efficacy and work engagement are negatively related to the intention to quit.

Method

Participants and procedures

Following university ethics approval, all students who had graduated with a teaching qualification between 2004 and 2008 from one university in southern Norway were invited to participate in the study. A total of 750 questionnaires were mailed to the addresses held by the university. 191 completed surveys were returned, representing a response rate of 25.6%. Compared with other studies using identical data gathering procedures the response rate is in line with former research (Burk 2001). The participants ranged from 25 to 57 years in age ($M = 33.7$, $SD = 7.1$) and 65.6% were female. The mean of teaching experiences was 3.3 years ($SD = 1.3$).

Instrument

Teacher self-efficacy

Teacher efficacy was measured using the Personal Teacher Efficacy Scale (PTE) (Hoy and Woolfolk 1993). The scale consists of five items measuring teachers' beliefs or conviction that they can influence how well students learn, even those who may be difficult or unmotivated. Item examples: 'If a student did not remember information I

gave in a previous lesson, I would know some techniques to redirect him/her quickly' and 'If I really try hard, I can get through to even the most difficult or unmotivated students'. Responses were indicated on a six-point Likert scale with a response format from strongly agree (1) to strongly disagree (6). In the present sample, the subscale PET showed good internal consistency with a Cronbach's alpha = .79.

Work engagement

Work engagement was assessed using the Utrecht Work Engagement Scale (UWES) (Schaufeli, Bakker, and Salanova 2006). The UWES consists of 17 items measuring three subscales that reflect the underlying dimensions of engagement.

Vigor subscale (six items)

Vigor reflects the level of mental resilience and energy while working, and the willingness to invest effort in the work, and persistence even in the face of difficulties. Example of vigor items: 'At work, I feel bursting with energy', and 'At my job, I am very resilient, mentally'.

Dedication subscale (five items)

Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge. Example of dedication items: 'I find the work that I do full of meaning and purpose' and 'I am enthusiastic about my job'.

Absorption subscale (six items)

Absorption is characterised by being fully concentrated and happy engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Examples of absorption items are: 'Time flies when I am working' and 'When I am working, I forget everything else around me'. All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*always*). UWES has demonstrated satisfactorily validity and reliability (Schaufeli, Bakker, and Salanova 2006). In this study the Cronbach's alphas for the three UWES factors were: vigor = .86, dedication = .87, and absorption = .87.

Burnout

Burnout was measured with the Copenhagen Burnout Inventory (CBI) (Kristensen et al. 2005). The CBI is divided into three subscales, but in this study, only the 'work related burnout (WRB)' subscales were used. WRB comprises seven items on symptoms of exhaustion related to work and applies to every person in the workforce. Item examples include: 'Do you feel burnt out because of your work?' and 'Do you feel worn out at the end of the working day?' All items have five response categories ranging from 1 (*never/almost never*) to 5 (*always*). Scale scores are calculated by taking the mean of the items in that scale. Higher scores indicate more work related burnout. In the present sample, the factor showed good internal consistency; the Cronbach's alpha was .88.

Intention to quit

This scale consisted of two items (Burke 1991). These were ‘At this time in your career, would you want to quit this job if it were possible?’ and ‘Have you ever had thoughts of leaving your present job?’ The items are scored on a five-point Likert scale, and a higher score indicates a stronger intention to quit. The Cronbach’s alpha was .93.

Job satisfaction

This was measured by a five-item scale developed by Quinn and Shepard (Quinn et al. 1974). A sample item: ‘All in all, how satisfied would you say you are with your job?’ All items are scored on a five-point Likert scale, and a higher score indicates a higher degree of job satisfaction. The Cronbach’s alpha was .71.

Results

The Statistical Package for Social Science (SPSS) Windows version 17 was used to analyse the material. Means, standard deviation and inter-correlation between all variables are reported in Table 1.

As can be seen in Table 1, levels of teacher efficacy, work engagement, and job satisfaction are above the midpoints on the scale, and the intention to quit is under the midpoint on the scale. Furthermore, Table 1 shows that PTE and all work engagement subscales are significantly and negatively correlated with the intention to quit and to work burnout. Moreover, a significant positive correlation was detected between PTE and work engagement subscales on job satisfaction.

In order to study the effect of PTE and the three engagement subscales (vigor, dedication, and absorption) on the novice teacher’s job satisfaction, work burnout, and intention to quit, three multiple regression analyses were carried out (Table 2).

The analyses show that the PTE and the three work engagement subscale accounted for 32% of the variation for job satisfaction, 42% of the variation for work burnout, and 32% of the variation in the scale of intention to quit (Table 2). As can be seen in Table 2, dedication has a significant and positive effect on job satisfaction (β .48, $p < .01$). Furthermore, for work burnout a significant negative effect emerged from energy (β -.59, $p < .01$) and dedication (β -.38, $p < .01$). Absorption had a significant positive effect on work burnout (β .46, $p < .01$). Moreover, for the depen-

Table 1. Descriptive statistics and bivariate correlation between all main variables.

| | M | SD | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------------|------|------|-------|-------|-------|-------|--------|--------|
| 1. Personal teacher efficacy (PTE) | 4.11 | 0.84 | .46** | .44** | .30** | .30** | -.34** | -.27** |
| 2. Vigor | 5.45 | 1.07 | | .85** | .78** | .50** | -.57** | -.48** |
| 3. Dedication | 5.83 | 1.05 | | | .77** | .55** | -.55** | -.51** |
| 4. Absorption | 5.04 | 1.12 | | | | .38** | -.31** | -.27* |
| 5. Job satisfaction | 4.17 | 0.83 | | | | | -.62** | -.57** |
| 6. Work burnout | 2.15 | 0.68 | | | | | | .64** |
| 7. Intention to quit | 1.89 | 1.19 | | | | | | |

Note. * $p < .05$; ** $p < .01$

Table 2. Multiple regression analysis with job satisfaction, work burnout, and intention to quit as dependent variables.

| Variables | Job satisfaction | Work burnout | Intention to quit |
|---------------------------|------------------|--------------|-------------------|
| | β | β | β |
| Personal teacher efficacy | .04 | -.04 | -.02 |
| Vigor | .20 | -.59** | -.31* |
| Dedication | .48** | -.38** | -.53** |
| Absorption | -.16 | .46** | .38** |
| <i>F</i> | 14.00** | 22.33** | 14.59** |
| <i>R</i> ² | .32 | .42 | .32 |

dent variable intention to quit a significant negative effect emerged from vigor (β -.31, $p < .05$), and dedication (β -.53, $p < .01$). Absorption had a significant positive effect on the dependent variable intention to quit (β .38, $p < .01$).

Discussion

The aims of this study were to investigate the impact that teacher's efficacy and work engagement have on job satisfaction, job burnout and the intention to quit. Specifically three hypotheses were proposed and tested and identified that teachers' efficacy and work engagement is negatively related to job burnout (H1) and positively related to job satisfaction (H2) and negatively associated to the intention to quit (H3).

H1: Teachers' efficacy and work engagement are negatively related to job burnout

The correlation analyses presented in Table 1 indicated that there is a significant negative relationship between teacher efficacy and work engagement and job burnout. The correlation result was in line with Hypothesis 1, and this negative relationship is also in line with previous research on teachers with more occupational experience (Betoret and Artiga 2010; Eged and Short 2006; Skaalvik and Skaalvik 2010). Moreover, Schaufeli et al. (2006) stated that work engagement may be conceived as the positive antipode of burnout, and Gonzalez-Roma et al. (2006) suggest that vigor and dedication are the opposite poles of the burnout dimensions of exhaustion and cynicism. Contrary to Hypothesis 1, the regression analyses only partly confirmed the hypothesis. In the regression analysis the independent variables accounted for 42% of the variance in the dependent variable burnout, and vigor and dedication emerged as a negative predictor which aligns with the hypothesis, but absorption emerged as a positive predictor in relation to the dependent variable. This unexpected finding is difficult to explain, but one possible reason for this result may be that the newly qualified teachers experience their working conditions as overwhelming. Studies of newly qualified teachers with a qualitative design describe their entrance in the teaching profession as a reality shock (McCormack and Thomas 2003), and, as early as 1975, Lortie described the initial years in the teaching profession as a question of sinking or swimming. With strong dedication and high vigor in overwhelming conditions, it is plausible to suggest that absorption is related to job burnout. It is also rational to expect that work engagement up to a

certain threshold may protect the newly qualified teacher from burnout, but beyond a threshold level, work engagement may also lead to burnout.

The results also reveal that the level of burnout symptoms was relatively low among the newly qualified teachers and the prevalence seems to be in line with results from other Scandinavian studies (Borritz et al. 2006).

H2: Teachers' efficacy and work engagement are positively related to job satisfaction

The results (Table 1 and 2) fully support Hypothesis 2. These results are coherent with recent research in teachers with longer experience reported by Klassen and Chiu (2010), and Klassen et al. (2009) and Viel-Ruma Houchinset al. (2010), who argue that teacher self-efficacy has a direct effect on job satisfaction. However, in the regression analyses the independent variables (PTE and work engagement) in combination accounted for 32% of the variance in job satisfaction, but only dedication emerged as a significant predictor.

The results in Table 2 show that the contribution of the sub-dimension vigor to the explanation of the variance in the dependent variables 'job burnout' and 'intention to quit' is significantly negative.

From a practical point of view it is important to know that vigor is negatively related to job burnout and the intention to quit, but has little impact on whether the newly qualified teacher is satisfied with the job or not. The results in Table 2 show that the sub-dimension dedication is significantly related to job satisfaction and negatively related to burnout and intention to quit. From a leader perspective it will therefore be vital to facilitate dedication in newly qualified teachers. In line with Bandura's social learning theory observation of dedicated colleagues and the leaders' appreciation of and gratitude toward dedicated teachers could be possible efforts that might have a positive effect on the dedication in newly qualified teachers. Qualitative research among Norwegian nurses who maintain health in spite of demanding work, indicates that a reason for this may be their reflection on the meaning of their work and that they are able to sustain meaning through self-care (Vinje and Mittelmark 2007). The items in the dedication subscale are strongly related to meaning and in our opinion discussions among colleagues and the newly qualified teacher that emphasise the meaning of the work can be actions that may prevent burnout.

H3: Teachers' efficacy and work engagement are negatively related to intention to quit

As can be seen in Table 1 and 2, the dependent variable PTE and work engagement subscales were negatively correlated to the intention to quit. Moreover, the regression analyses accounted for 32% of the explained variance in the dependent variable and vigor and dedication emerged as a negative predictor, while absorption emerged as a positive predictor. Taken together Hypothesis 3 is partly confirmed.

It is logical to presume that those employees with job burnout, or who are in the process of developing job burnout, would reflect on ending their teaching career – and the results revealed that there is a significant positive relationship between job burnout and the intention to quit. Based on this positive relationship it is reasonable to assume that the subscales in the work engagement scale will show the same pattern.

An alternative explanation for the fact that absorption appears as a positive predictor is that when you are immersed in your work, it also includes thinking of the demands of the occupation, which in the next step leads to ideas about leaving the profession.

From a more practical point of view the results indicate that both leaders and colleagues of the newly qualified teachers should be especially aware of the positive connection between absorption, burnout and the intention to quit. Monitoring the absorption in dialogue with the newly qualified teacher and giving concrete advice on time management are possible solutions in avoiding absorption increasing burn-out and thoughts about giving up the teaching profession.

Absorption in the newly qualified teacher may be a result of the inability to choose between relevant and irrelevant information in the school context. In Hansen, Raaen, and Østrem's (2010) study, newly qualified teachers report an overload of tasks and demands which are not directly related to teaching the students (planning and organising of eating breaks, deadlines for national tests, meetings with other staff members and security responsibility for students during breaks). The newly qualified teachers may find that there is a lot to remember and the available time is not enough to do the work as well as they would have hoped. Research in several domains shows that expertise is related to the ability to single out the most relevant information and behave in accordance with it. In line with ecological perceptual theory (Gibson 1979) guidance about what is relevant information and where it can be found might be one key to helping the newly qualified teachers to handle the first period of their professional career.

Practical implications

Based on the result of this study it is our opinion that both teachers and school managers should behave in accordance with Bandura's self-efficacy theory. One major task as a teacher is to facilitate student self-efficacy while school managers should facilitate the teaching efficacy of newly qualified teachers. According to the latter, in order to foster young teachers in their first professional years, help and guidance may be especially important. Informal help and guidance are obviously necessary, but also formal mentoring or colleague-based guidance should be established. Research on mentoring has identified several positive benefits linked to mentoring, such as career advancements, greater work attitude, satisfaction and commitment, higher productivity and performance (Kram 1985; Murray 2001; Noe 1988; Ragins and Kram 2007). Moreover, due to the 'reality shock', reduced workload (e.g., less teaching the first year), paralleled with increased systematic focus and reflection related to their teaching practice and teaching role may be another strategy or possibility.

In line with Bandura's self-efficacy theory it might be vital that school leaders are especially aware of which tasks or classes the newly qualified teacher is given. A lack of mastery in the first years of their teaching career may decrease the teachers' belief in their PTE, which is unfortunate for their teaching performance. Furthermore, it may have a negative impact on the vigour dimension of their working engagement. By strengthening vigour, it might be possible to prevent burnout and decrease thoughts about leaving the profession in the newly qualified teacher.

In an eight-year follow up study on Finnish teachers' work, stress, and health, Kinnunen and Salo (1994) suggest that teacher's stress is not a short-lived problem and half of teachers with high emotional stress reactions in 1983 were in the same

category in 1991. From a practical point of view this result indicated that early interventions related to motivational and emotional difficulty in teachers are advised. In our opinion research-based knowledge about work engagement, teacher efficacy and burnout should be a topic in teacher education because it could establish a professional mental readiness for managing emotional and motivational challenges in their professional career.

Limitation and further directions

The results of this study should be viewed with caution until replicated in future research because several factors might limit their generalisation. First, our respondents graduated from one university. Second, the response rate was 26%, and although we found no evidence for response bias the possibility that our respondents were not a representative sample remains. Even if the measurement used in this study had content validity and generally met accepted psychometrical standards, it is suggested that further testing and construct validation of the instruments be undertaken in a Norwegian sample. These kinds of correlation design have limitations related to causality and future research should therefore cover the teachers' development from novice to expert teacher, which highlight the importance of using longitudinal design. Further investigations must also continue to examine newly qualified teachers' experiences, and we believe that including student perceptions of their teachers' pedagogical, social and psychological attitude, behaviour, and skills are important.

Notes on contributors

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