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Teachers' Pedagogical Beliefs as Predictors of Teacher Burnout

Abstract

The presented study examined the relationship between teachers' pedagogical beliefs and their experience of burnout. Its participants were 230 schoolteachers from fourteen Slovenian primary schools. The Questionnaire of Teacher Pedagogical Beliefs and Maslach Burnout Inventory-Educators Survey were applied. The findings suggest pedagogical beliefs as predictors of teacher burnout dimensions. Teachers' negative pedagogical beliefs about students' behavior and discipline maintenance are related to a greater experience of emotional exhaustion whilst negative beliefs about teachers' trust in students and the role and responsibility of the teacher are related to a greater experience of depersonalization and decreases in personal accomplishment.

Keywords: *primary school teachers, teachers' pedagogical beliefs, teacher burnout*

Introduction

Teacher stress and burnout are recognized as serious problems and are believed to contribute to physical illness, absence, and early retirement from the teaching profession (Dunham, 1992; Slivar, 2009). For this reason, teacher stress and burnout have become an area of interest for many researchers. Their causes and consequences have been well researched. Considering the variables that predict teacher stress and burnout, the research focused mainly on environmental variables: workload (Genoud, Brodard & Reicherts, 2009), school context (Collie, Shapka &

Perry, 2012; Goddard, O'Brien & Goddard, 2006) and social support (Hodge, Jupp & Taylor, 1994). Another line of investigation focused on person-specific variables; these included personality traits (Miškolciová, 2010; Stoeber & Rennert, 2008), perceived self-efficacy (Evers, Brouwers & Tomic, 2002; Klassen & Chiu, 2010) and demographic variables, such as gender (Grayson & Alvarez, 2008; Rey, Extremera & Pena, 2012) and age (Goddard et al., 2006). However, the relationship of teachers' attitudes and beliefs to teacher stress and burnout has been less researched. There is some minor research evidence suggesting a possible relationship between teacher burnout and teachers' ideology (Lunenburg & Cadavid, 1992) or teacher stress and teacher collective efficacy beliefs (Klassen, 2010); otherwise, this area remains insufficiently described.

The concept of burnout

Burnout is a job-related syndrome. It manifests itself in three dimensions: emotional exhaustion, depersonalization and reduced personal accomplishment. Emotional exhaustion is shown as the feeling of being emotionally drained by work, or worn out at the end of almost every workday. Depersonalization is characterized by feelings of callousness towards other people. Finally, burnout includes a reduced sense of personal accomplishment or the feeling that one is dealing less effectively with clients and with problems (Maslach, 1993; Maslach & Leiter, 1997). Teachers suffering from burnout thus find that they can no longer give themselves to students as they once could as now they have chronically drained energies (emotional exhaustion). They no longer have positive feelings about their students and display indifferent, negative attitudes toward them; that can be shown in many ways, e.g. by using derogatory labels for the students, exhibiting cold or distant attitudes, physically distancing themselves from students and tuning out students through psychological withdrawal (depersonalization). Teachers also no longer feel that they are contributing to their students' development and become vulnerable to experiencing profound disappointment (low personal accomplishment) (Maslach, Jackson & Leiter, 1996).

Research evidence shows that teacher burnout typically starts with the development of emotional exhaustion, which leads to the development of depersonalization. The third burnout dimension, personal accomplishment, is determined directly by emotional exhaustion and indirectly through depersonalization (Genoud et al., 2009).

Teachers' pedagogical beliefs

Beliefs can be described as acceptance of an idea as accurate or truthful (Lefrançois, 1999). Pedagogical beliefs are, therefore, teachers' beliefs connected with teaching, i.e. beliefs about learning goals, students and learning. Unlike knowledge, which tends to be impersonal and impartial, beliefs often have strong emotional components, and are thus reflected in attitudes, prejudice, and opinions (Lefrançois, 1999) or take part in the development of attitudes, and can be regarded as a part of attitude structure (Chaiken, 2001).

There are different factors contributing to the development of the teacher's beliefs: the teacher's experiences during his/her schooling and information that the teacher gathers during his/her training or from other sources. Block and Hazelip (1995) thus name three kinds of teachers' beliefs: descriptive beliefs that stem from teachers' personal observation, inference beliefs that stem from conclusions based on personal observation, and informational beliefs that stem from outside sources. Even though teachers' beliefs are influenced by a multitude of their experiences, the experience they had had as students seems to be the most prominent one.

Teachers' beliefs are resistant to change (Lefrançois, 1999), which is also so with regard to teachers' pedagogical beliefs; their descriptive beliefs are the strongest and most resistant to change, especially beliefs about students and their learning that stem from teachers' classroom experience. In time, as beliefs begin to combine and form a system, they strengthen even more, thus making a change in a single belief more difficult or even impossible without a change in the system to which this belief belongs (Block and Hazelip, 1995).

Teachers' pedagogical beliefs are expressions of their views of students and of teachers' professional roles. As such, they have a significant influence on teachers' behavior in the classroom and their relationships with students. For this reason, examining teachers' beliefs in studying teacher burnout is advisable.

Aims of the study

The presented study examined the relationships between teachers' pedagogical beliefs and the three dimensions of teacher burnout. The study involved a sample of teachers of Slovenian nine-year primary schools.

Methodology

Participants

About 500 teachers working in nine-year primary schools in Slovenia were asked to participate in the study. In all, 230 questionnaires were returned, which represented a response rate of 46%. The majority of the teachers were full-time teachers (96%); only a few respondents worked part-time. Of all the respondents, 193 were women (84%) and 37 were men (16%). Their age ranged from 24 to 62 years, with most respondents under 45 years of age (75%). A half of the participants taught in lower grades (Grades 1 to 5 and/or after school program), and the other half taught in higher grades (Grades 6 to 9).

Instruments

Burnout

Burnout was measured using the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, Jackson in Schwab, 1986), translated to Slovene. It includes 22 items, which are written in the form of statements about personal feelings or attitudes and are measured on a 7-point Likert scale, ranging from "never" to "every day". The items are divided into three subscales. The Emotional Exhaustion (EE; 9 items) subscale assesses feelings of being emotionally overextended and exhausted by work. The Depersonalization (D; 5 items) subscale measures the unfeeling and impersonal response towards students. The Personal Accomplishment (PA; 8 items) subscale assesses feelings of competence and achievement in the teacher's work with students. Scores on the scale are added separately. High scores on the EE and D scales, combined with low scores on the PA scale are indicative of burnout (Maslach et al., 1996).

The three-factor structure of the Slovenian translation of MBI-ES was confirmed with principal component analysis. The internal consistency coefficient alphas were.88,.84 and.54 for EE, D, and PA, respectively (Depolli Steiner, 2010).

Teachers' pedagogical beliefs

The Questionnaire of Teacher Pedagogical Beliefs (QTPB) was constructed for the purpose of this study. It consists of 37 items in the form of statements about students, learning and teaching. The level of agreement with each statement is measured on a 5-point Likert scale, ranging from "I completely agree" to

"I completely disagree". At the positive end of the scale there is the teacher who has the ability to create beneficial relations with students, who regards students as motivated for schoolwork, who shows high trust in students' abilities, and regards them as sufficiently mature and self-reliant. This teacher also feels a high level of his/her responsibility for students' behaviors and achievements. The negative end of the scale pictures a domineering teacher, who believes in the importance of being strict, who expresses lack of trust in students' abilities and regards them as highly immature, irresponsible and lacking self-reliance. This teacher also feels that the responsibility for students' behaviors and achievements lies in factors that are not under his/her control.

To determine the underlying structure, all the 37 items were included in a principal components analysis. A four-factor structure was found to be the best solution (eigenvalues 4.44, 4.36, 2.98 and 2.28, respectively) and, rotated orthogonally using varimax, accounted for 12%, 12%, 8% and 6%, respectively. The factors were labeled:

Subscale "Students' behavior and discipline maintenance" (10 items; internal consistency coefficient: a =.81) measures the strictness-permissiveness dimension.

Subscale "Students' motivation and learning abilities" (12 items; a =.82) measures the teacher's low/high regard of students' motivation and learning abilities.

Subscale "Teacher's trust in students" (8 items; a =.69) shows the teacher's low/high opinion of his/her students' maturity, responsibility and self-reliance.

Subscale "Teacher's role and responsibility" (7 items; a =.61) expresses the teacher's opinion of his/her role in classroom activities and students' behavior and achievements.

Procedure

The study took place in the February and March of 2005. The principals of 14 randomly selected schools in urban and rural areas in Slovenia were asked to participate in the study; they were mailed questionnaires along with a request to distribute the questionnaires to every teacher in their school. The questionnaires were accompanied by a letter explaining the nature and general aim of the study. Participation was voluntary, and all the participants were guaranteed confidentiality. The completed questionnaires were collected by school counselors and returned to the author of the study by mail.

Results and discussion

The correlation matrix for the four beliefs factors with the three burnout dimensions is shown in Table 1. All the four belief factors are negatively correlated with EE and D, with only one of these correlations not reaching statistical significance at the level of p =.05. Two of the four beliefs factors are positively correlated with PA and reached statistical significance at the level of p =.05. Even though these correlations are low, with the exception of the correlation between beliefs about students' behavior and discipline maintenance and EE, which is medium, they do suggest that teachers showing more negative pedagogical beliefs are likely to experience higher levels of EE, higher levels of D and lower levels of PA.

However, one must bear in mind that all the significant correlations are low, and the variance accounted for is slight. Even in the case of the relationship of beliefs about students' behavior and discipline maintenance with EE, which yielded the highest correlation coefficient obtained, the variance accounted for is only 12%.

Table 1. Correlations between pedagogical beliefs and three dimensions of burnout

Pedagogical beliefs factor	Correlation with burnout		
	EE	D	PA
Students' behavior and discipline maintenance	−.35*	−.21*	−.04
Students' motivation and learning abilities	−.21*	−.16*	−.03
Teacher's trust in students	−.10	−.25*	.26*
Teacher's role and responsibility	−.19*	−.18*	.18*

Note: * p <.05

To investigate which of the independent variables best predicted the level of each single burnout dimension, a series of multiple regression analyses was carried out using scores on the burnout dimension in question as the dependent variable and the teachers' pedagogical beliefs factors as predictors.

The results of multiple regression analyses (cf., Table 2) showed that only beliefs about students' behavior and discipline maintenance were significant and negative predictors of the EE dimension of burnout. Only beliefs about the teacher's trust in students and beliefs about the teacher's role and responsibility were significant and negative predictors of the D dimension of burnout. Only beliefs about the teacher's trust in students and beliefs about the teacher's role and responsibility were significant and positive predictors of the PA dimension of burnout. Only beliefs about

the teacher's trust in students were also significant and negative predictors of the D dimension. The total of the variance explained by teachers' beliefs factors was 13% for EE ($F(4, 225) = 8.53$; $p < .001$), 10% for D ($F(4, 225) = 6.12$; $p < .001$) and 10% for PA ($F(4, 225) = 6.60$; $p < .001$).

Table 2. Multiple regression analysis results for the prediction of burnout dimensions

Independent variables	EE		D		PA	
	β	R2	β	R2	β	R2
Students' behavior and discipline maintenance	−.34*		−.13		−.14	
Students' motivation and learning abilities	.03		−.01		−.03	
Teacher's trust in students	.02		−.19*		.28*	
Teacher's role and responsibility	−.13		−.11		.15*	
		.13*		.10*		.10*

Note: * p <.05

These results indicate that teachers' pedagogical beliefs contribute significantly to explaining the variance of the teacher burnout dimensions even though this contribution is rather small. The largest contribution is by beliefs about students' behavior and discipline maintenance; however, only in predicting teachers' EE. Beliefs about the teacher's trust in students contribute significantly to predicting both the D and PA dimensions, whilst beliefs about the teacher's role and responsibility contribute only to predicting teachers' PA. The regression analyses also showed that the last of the beliefs factors, i.e. the beliefs about students' motivation and learning abilities, which was in correlation to both EE and D (cf., Table 1), has no significant contribution to explaining the variance of these two teacher burnout dimensions.

The presented study results on relationships between the pedagogical beliefs about students' behavior and discipline maintenance as well as the EE dimension of burnout can be explained as follows. We can assume that teachers' negative beliefs raise the number of stressors present at their work and also fortify the impact of these stressors. Strict teachers with a need to constantly monitor and direct their students' behavior are likely to have a strong and negative reaction to the behavior that they perceive as inappropriate or oppositional; such student misbehavior could even be perceived as a personal affront. More democratically oriented teachers perceive students in a more positive manner, which also shapes their perception of students' behavior, meaning that they will not be so quick in

perceiving a certain behavior as misbehavior. That is why it is highly likely that the number of situations perceived as problematic (i.e. demanding the teacher's immediate attention and reaction) by strict teachers largely exceeds the number of such situations perceived by more permissive teachers. Not only that, the strict teachers' reaction to perceived stressors is probably quite strong, meaning they are more distressed by certain negative situations than their more permissive colleagues are. Therefore, many strict teachers might have quite a heavy workload; to a certain degree, this is created by the teachers themselves as they see problems in situations that many other teachers do not and/or react to these problems with a more augmented stress reaction. The workload has already been recognized as an important cause of teacher stress and burnout in previous studies (e.g. Genoud et al., 2009). If teachers' workload is constantly high, they may begin to feel that the amount of their duties and responsibilities is becoming insurmountable, which gradually leads them to EE.

A possible explanation for the relationship between beliefs both about the teacher's trust in students and beliefs about the teacher's role and responsibility as well as D can be suggested. EE has already been confirmed as the precedent of D (Genoud et al., 2009); therefore, it can be assumed that once the teachers' levels of EE increase and remain high for a certain amount of time, they become more susceptible to loss of positive feelings about their students. The teachers who already believe that their students are immature, irresponsible and not self-reliant (negative beliefs about the teacher's trust in students), and feel that the responsibility for students' behaviors and achievements lies in factors that are not under teachers' control (negative beliefs about the teacher's role and responsibility), might be even more likely to reach augmented levels of D than are their colleagues who are experiencing increased levels of EE but initially have positive beliefs on these two factors. The same explanation can also be suggested for the relationship between the two beliefs factors in question and diminished PA: if the teachers experience EE and D, they might be more likely to stop feeling that they are contributing to students' development and thus become vulnerable to experiencing profound disappointment if they already have negative beliefs than if they have positive beliefs. It appears that teachers' positive beliefs about students' maturity, responsibility and self-reliance, and a high level of teachers' perceived responsibility for students' behaviors and achievements might work as a buffer against both D and a decrease in PA. The findings of the presented study are consistent with the study of Lunenburg and Cadavid (1992), who noted that teachers with a custodial orientation toward the control of pupils were more likely to experience greater levels of burnout. Teachers with a custodial pupil ideology

typically are of the opinion that students are undisciplined and irresponsible and, therefore, cannot be trusted and must be controlled through punitive sanctions. Low results on beliefs about students' behavior and discipline maintenance, and low results on beliefs about teacher's trust in students on the QTPB express the teacher's opinion about students that is in concordance with such an ideology; thus, the findings of the presented study are additionally confirmed.

Conclusions

The results of the presented study indicate that teachers' pedagogical beliefs are associated with burnout dimensions. Negative beliefs are correlated with high burnout scores. Therefore, teachers who have certain negative beliefs about students might be most at risk for development of burnout.

The findings also indicate that teachers experiencing higher levels of burnout view students more negatively than their non-burnt-out colleagues, meaning that burnt-out teachers are extremely likely to create a less welcoming, less warm, more impersonal and more controlling classroom environment than their non-burnt-out colleagues. If we speak from the students' point of view, it is certainly desirable to have teachers who are not suffering from burnout and are thus more likely able to create a positive classroom environment. Teachers are agents of students' achievement so their wellbeing should be one of the priorities of the education system. It would be beneficial for teachers and consequently for their students to attempt to nurture the development of positive pedagogical beliefs in teachers, both during their pre-service education and in-service training.

The presented study has some limitations. First, the QTPB has not, as yet, been fully validated. The factorial validity has been confirmed, but further external validation is still required. Second, a larger sample of teachers would be desirable. Third, some reservations must be expressed as to the direction of causation. The fact that teachers enter their service with beliefs that are already formed indicates that beliefs influence burnout. However, because burnout causes changes in a person's view of the world, the assumption that the experience of burnout can be a cause for the change in teachers' pedagogical beliefs also seems reasonable. For this reason, the direction of causation between beliefs and burnout should be addressed in further studies on teacher burnout. With a larger sample of respondents, structural equation modeling or path analysis should be used for this purpose.

However, in spite of the limitations, the advantage of this study is in the exposure of the relationship between teachers' pedagogical beliefs and their experience of burnout, which had not been previously researched. Our findings suggest that subsequent research into this area is certainly worth further attention.

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