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Abstract

Traditionally, the teaching role has been one of nurturing and developing students' potential. However, teachers' work today comprises a complex mix of various factors that include teaching; learning new information and skills; keeping abreast of technological innovations and dealing with students, parents and the community. These are demanding roles and there are growing concerns about teacher well-being and competence. In particular, teachers are experiencing increasing levels of attrition, stress and burnout. This study investigated the relationship between burnout and competence for a sample of mid-career teachers in primary and secondary schools in Queensland. The results break new ground in reporting a negative association between the MBI subscale Depersonalization and competence that may be attributed to a distancing mechanism in difficult human interactions. Overall, the findings of this study hold implications for teacher training courses and the well-being and competence of teachers.

Introduction

Teachers' work today is multifaceted as they undertake not only teaching but also matters associated with curriculum, students, parents, the school community and departmental initiatives. According to Smylie (1999), "These are tough times to be a teacher" (p. 59). Emerging issues of concern in the teaching profession are attrition rates and burnout levels. Ewing and Smith (2003) reported that between

25% and 40% of beginning teachers in countries in the Western World are leaving teaching or they are burned out. In Australia, a study conducted by Ramsey (2000) highlighted an upward trend in early-career teacher resignations and according to Macdonald (1999) overall teacher attrition in Australian government schools ranges from 3% to 8%. When this is considered in conjunction with the impending teacher shortage in Australia (Nelson, 2003), it is important to determine how teachers feel about their roles as this has implications for meeting society's expectations for education and for youth today; it also has implications for teacher well-being. Well-being, according to Dunn (2002) involves comparative private experiences with regard to self-perceived quality of an individual's life; it also includes both affective and cognitive components. The section that follows examines the current status of teachers with regard to their work roles and conditions. In particular, factors that may contribute to teacher well-being and burnout are examined in relation to work competence.

Factors that influence teacher well-being, burnout and competence

Traditionally, the role of teaching has been one of nurturing and developing students' potential. As Evers, Tomic and Brouwers (2004) report, teachers play a valuable role in helping children grow. In order to do this they must remain physically and mentally well. However, there is apparent dissonance between teachers' perceived capacities and the expectations of their role

(Smith & Bourke, 1992) yet, they continue to carry out their work. This may have implications for their physical and mental well-being and their professional competence as teachers.

Teacher well-being and competence have been related to job satisfaction and studies indicate that those teachers who are less satisfied are more likely to leave teaching. For example, Singh and Billingsley (1996) found factors such as stress, burnout, work overload, and job dissatisfaction contribute to teacher attrition while factors such as, administrative support, reasonable role expectations, and decreased workplace stress contribute to teachers' intention to stay in teaching. Sarros and Sarros, (1992), Taylor and Tashakkori, (1995) and Xin and MacMillan (1999) have all argued that one imperative to teacher commitment is the school principal's support. Principals play a pivotal role in steering the direction of their school which requires guiding the day-to-day business of the school including matters associated with both students and teachers. With regard to principals' support, Singh and Billingsley (1996) found that principals who gave feedback, encouragement and employed participatory decision-making fostered commitment within their staff. It is also apparent that a direct coping strategy adopted by teachers to manage stress is seeking support from school principals (Howard & Johnson, 2002). Darling-Hammond (1995) contends that the context provided by administration influences interaction among staff, teachers' feelings of being valued for their work and their sense of involvement in the school. Number of years of teaching experience is also often related to job satisfaction. Taylor and Tashakkori (1995) reported that longer teaching experience is associated with higher levels of job satisfaction. However, contrary to this, Xin and MacMillan (1999) report that teachers who have taught longer are less satisfied, thus continuing the debate and encouraging further research.

Job satisfaction and teaching competence are important variables in regard to teachers' continuing in the profession. Studies, for example Certo and Fox (2002), indicate that job satisfaction in teaching is associated with aspects such as workplace conditions, administrative control, and organizational culture. It includes how teachers feel about their own competencies such as their success in teaching students and generally how they feel about coming to work (Xin & MacMillan, 1999). When teacher satisfaction was examined by Scott and Dinham (2003), they found that it was influenced by student achievement and personal efficacy. They also found that teachers were less satisfied with the status of teachers and imposed changes to the educational system and their professional practices. Taylor and Tashakkori (1995) point out that in recent years, there has been an increase in numbers of difficult-to-teach students and there has been limited additional support, which in turn may lead to decreased levels of job satisfaction.

Teaching competence has been described as teachers believing they have the prerequisite knowledge of the subject/s they teach as well as the skills to teach effectively and with confidence (Little, 1995). Teaching competence also includes having access to effective and current instructional strategies and skills and enabling students to engage with and achieve expected standards for a course. However, competence can be compromised if a teacher is faced with a classroom of students, for example, to teach a subject in which they may have limited discipline knowledge. Additionally, classroom and behaviour management are implicit instructional strategies for working with students and, as such, they are also likely to influence teaching competence (Howard & Johnson, 2002). Consequently, it is important that teacher education courses are designed to equip pre-service teachers with current skills and knowledge required to work with students and become competent teachers. It is also essential that professional development for those currently teaching is ongoing and enhances teaching competence.

From the above discussion, it may be plausible to argue that teacher well-being is influenced by job satisfaction and competence and lack of well-being associated with work may lead to stress which in turn may affect job performance. According to Rudlow (1999), appraisal of and coping with work demands are central to the process of stress; he cautions that most day-to-day, work related activities may result in varying levels of stress. However, in the course of a day, this does not result in burnout. Rudlow explains that active and palliative coping strategies such as searching for solutions and analyzing problem situations help to lessen stress and burnout. While stress has been an issue for teachers for some time it is only recently that burnout has increased (Rudlow, 1999). Burnout happens when individuals endure prolonged periods of high levels of stress. Thus, increasing burnout rates among teachers is indicative of them facing increased and prolonged levels of stress (Hamann & Gordon, 2000). Maslach (1999) also confirms that burnout is a long-term process that results from prolonged exposure to chronic job stressors. Evers et al., (2004) in their recent study to unpack burnout, argue that it can be depicted as including both physical and mental exhaustion.

In recent years several studies into teacher burnout have been conducted (Brouwers, Evers & Tomic, 2001; Goddard & O'Brien, 2003; Trent, 1997). Brouwers, Evers, and Tomic examined burnout with 277 secondary school teachers who were mostly mid-career and veteran teachers (Bassett, 1996) in the Netherlands. The Dutch version of the MBI was used to measure burnout which is described as a "psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity" (Maslach, 1993, pp. 20-21). Emotional Exhaustion refers to feelings of being emotionally overextended, Depersonalisation involves a negative, callous and detached attitude to people and reduced Personal Accomplishment refers to a negative self-evaluation of one's job performance. Findings from the study conducted by Brouwers et al. indicate that teachers' belief in their capability to maintain classroom order and discipline was a significant predictor of burnout. The study also found that teachers who felt they lacked support from colleagues and principals were less confident in their capacity to elicit support from them. Trent (1997) maintains that, in Australia, teachers are increasingly becoming stressed and in many instances this leads to professional burnout. She piloted an intervention program designed to reduce teacher burnout in a school in Sydney, Australia, which comprised four main goals, namely, restoring balance and perspective within staff, reducing teachers' feelings of isolation, increasing teachers' self-esteem, and identifying a strategic plan of action. Other measures included encouraging support groups and more regular and informal staff meetings so that issues of concern could be discussed.

In a longitudinal study following the progress of teacher graduates during their first year in the profession, Goddard and O'Brien (2003) examined well-being for 123 beginning teachers in Australia using the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) and found that burnout increased significantly over an eight month period. Furthermore, significantly higher burnout levels were reported by beginning teachers who stated that the effort they were putting in to perform their professional duties was greater than the rewards they achieved in comparison to teachers who perceived the effort-reward balance was equitable. Overall, Goodard and O'Brien confirm that the year after concluding university study a significant proportion of graduates who immediately commenced a teaching degree were experiencing burnout within their first 8 months of teaching. Sarros and Sarros (1992) also found that younger teachers reported high levels of burnout while Singer (1993) notes that beginning teachers are especially at risk of leaving. This could hold implications for pre-service teacher preparation in that teacher education courses may need to be restructured.

Rationale for the study

In the midst of rapidly changing work environments, driven by knowledge creation and innovation, workers are expected to continually adapt and keep up with new information and practices. This may impact on workers' feelings of competence and consequently their well-being in the workplace. Teaching is a profession that is beset by changes due to reconceptualisation and restructuring of education (Sealey, Robson & Hutchins, 1997) and demands are placed on teachers to develop new knowledge and skills and to frequently perform new tasks (Smylie, 1999). When this is considered in light of the above literature it is apparent that there are various factors that may influence teacher well-being and competence. If teachers do not experience a sense of well-being in their work and they feel they lack competence, this may result in high attrition rates (Macdonald, 1999; Ramsey, 2000) and high stress levels (Trent, 1997). The intention of this study is to investigate whether a relationship exists between burnout and competence in a random sample of mid-career teachers. Specifically, it investigates:

∞ Perceived competence in daily work;
∞ Perceived states of internal control related to work;
∞ Teacher burnout in terms of emotional exhaustion, depersonalization and personal accomplishment; and
∞ Whether there is a significant relationship between self perceived competence and self reported burnout.

The findings hold implications for teacher training courses, professional development and the overall well-being of teachers. This is of importance given the increasing incidence of burnout and that it has a detrimental effect upon individual workers which can impact on the quality of service that is delivered by an organization employing workers who are burned out (Maslach & Goldberg, 1998; Maslach & Leiter, 1997). In teaching this is relational to productive teaching and learning environments.

Sample

Random sampling involved questionnaires being mailed to 500 teachers in government schools; reply paid envelopes and consent forms were included with the questionnaire. Contact details and teacher profiles were gained from Education Queensland. Respondents were mostly mid-career or veteran teachers registered in the Australian state of Queensland. Bassett (1996) defines mid-career teachers as those who have been teaching from 6 to 20 years and veteran teachers are those who have been teaching for 21 year or more. A total of 157 useable questionnaires were returned. The final sample comprised 41 (26%) male and 116 (73.9%) female teachers. Most held full-time (82.8%), permanent positions (93%) and were 41-50 years of age (35.7%). The majority of teachers, that is 71.3%, were either married or living with a partner and 54.1% had Bachelor degrees.

Instrumentation

The source of data was a questionnaire that comprised six sections: A. demographic items – gender, age, marital status, and highest education completed; B. work details including work place, work level and whether work was full-time or part-time and permanent or contract; C. current perception of life/work; D. current perception of job satisfaction; E. Perceived Control of Internal States Scale (PCOISS); and F. the Educator Survey version of the MBI.

The Educator Survey version of the MBI (Maslach, Jackson, & Leiter, 1996) is a 22 item self-report instrument described in the literature as "the most widely used operationalization of burnout" (Lee & Ashforth, 1996, p. 124). The MBI consists of three subscales: Emotional Exhaustion (EE: sample item, "I feel emotionally drained from my work"), Depersonalisation (DP: "I feel I treat some students as if they were impersonal objects"), and Personal Accomplishment (PA: "I feel I am positively influencing other people's lives through my work"). Participants respond on a seven-point frequency rating scale, ranging from "never" (0) to "every day" (6). High scores on the EE and DP subscales and low scores on the PA subscale are characteristic of burnout. Reliability coefficients published in the technical manual were .90 for EE, .79 for DP, and .71 for PA (Maslach et al., 1996). In the present study, the corresponding coefficient alpha scores were .91 for EE, .77 for DP, and .82 for PA.

The PCOISS is an 18-item self-report scale. It is designed to "measure respondents' perceptions of their ability to control their internal states and to moderate the impact of aversive events on their emotions, thought, and physical wellbeing" (Pallant, 2000). According to Pallant it has good internal consistency (Cronbach alpha=0.92).

The questionnaire also included a series of questions to determine turnover intention:
∞   Are you seriously considering leaving your current job?   YES/NO.
∞   If YES, please explain why?
∞   If YES, what are you considering as an alternative to your current job?

Janssen, de Jong and Bakker (1999) employed a similar method to determine turnover intention in a study with nurses in Dutch hospitals, that is, one question asked respondents if they were planning to leave within a year.

Data analysis
Data from the completed surveys were entered into SPSS 11.5 (SPSS Inc., 2003) and correlation analyses were conducted. This is in line with Beehr's (1985) contention that there are limited rigorous methodological constructs for social science research therefore, showing relationships, without implying causal linkages, is the best means of data analysis.

Results

Workload and burnout

Teacher respondents reported being in a teaching role for an average of 114 months (SD = 105) and working an average of 42 hours per week, however this later figure included the working hours of 27 respondents who worked part-time. Full-time respondents worked an average of 45 hours per week. Mean weekly working hours for teachers participating in the present investigation are presented in Table 1 along with means for burnout levels (MBI) and self-rated perceptions of control of inner states (PCOISS). As a further indication of how respondents view their current workloads, they were asked to rate the effort they were putting into their work with respect to the rewards that resulted from undertaking this work. Almost half the respondents indicated that they thought the effort they were putting into their work was greater than the rewards (see Table 2).

Table One
Summary scores describing Workload, Burnout and Coping reported by teacher respondents working in Queensland public schools during 2003

Variables	n	M	SD	Range
Workload				
Average Weekly Working Hrs	153	41.86	13.29	2 - 75
Burnout (MBI)				
Emotional Exhaustion	152	22.36	11.39	2 - 46
Depersonalisation	151	5.92	5.68	0 - 25
Personal Accomplishment	149	38.48	6.89	18 - 48
Perceived Coping of Internal States Survey (PCOISS)				
PCOISS Summary Score	153	86.98	17.55	31 - 118

Note. n reflects the actual number of respondents answering each question or completing all items on a measure. MBI = Maslach Burnout Inventory

As mean MBI and PCOISS scores for part-time teachers were not significantly different from corresponding scores for the full-time teacher cohort (see Table 2), the following burnout analysis includes all teacher respondents. Compared to MBI normative data based on 4,163 American teachers (Maslach et al., 1996), teachers in the present study reported significantly lower burnout levels on two of the three MBI subscale scores, $t(150) = 10.99$, $p < .001$ for the Depersonalization subscale, and $t(148) = 8.76$, $p < .001$ for the Personal Accomplishment subscale. The mean Emotional Exhaustion subscale for the Queensland teachers was not significantly different from the normative population, $t(151) = 1.20$, $p > .05$. This overall pattern of results is consistent with the observation that although working an average of 42 hours per week, serious levels of burnout were not evident across this sample of teachers.

Table 2
PCOISS and MBI Comparisons for various cohorts of teachers.

	PCOISS		MBI (Subscale Means)		
	n	Mean	EE	DP	PA
Gender					
Males	39	87.70	23.80	7.36	37.97
Females	112	86.73	21.85	5.42	38.66
Working Hours					
Full-time	127	88.21	23.14	6.08	38.91
Part-time	27	80.96	18.74	5.19	36.46
Marital Status					
Married	108	87.39	22.69	6.08	38.51
Not Married	25	84.00	22.56	5.36	37.63
Serious consideration to leaving current job					
YES	45	83.00	28.36	8.76	36.02
NO	106	88.59	19.84***	4.72***	39.48*
Teacher respondent view of Workload Equity					
Effort > Rewards	74	82.41	28.64	7.95	36.47
Rewards > Effort	83	91.23**	16.56***	4.03***	40.36**

Notes. n reflects the number of respondents answering each question. PCOISS = Perceived Control of Inner States Scale. MBI = Maslach Burnout Inventory. EE = Emotional Exhaustion, DP = Depersonalisation, PA = Personal Accomplishment. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 2 details means for burnout and perceived control for various respondent cohorts investigated by the present study. Inspection of Table 2 indicates that burnout and perception of control of inner states were not significantly different for males and females, for married and

not married respondents and whether engaged in part-time or full-time teaching work. As expected, respondents who indicated that they were seriously considering leaving their current job and respondents who perceived the effort they were putting into their work was greater than the rewards they were getting back reported significantly higher burnout levels on all three MBI scales. Additionally, the cohort of respondents who indicated that the effort they put into their jobs was greater than the resultant rewards also reported a significantly lower mean PCOISS score suggesting a negative relationship between the ability to control of inner states and perceptions of workload equity.

Competency analysis

To gauge an accurate measure of self-rated competency, respondents were asked a series of questions about how well they were doing their job from the four perspectives used in a 360 degree analyses. Respondents were asked to rate their job competence on a five point likert scale (i) from their own perspective, (ii) from their supervisor's perspective, (iii) from their colleagues' perspective, and (iv) from their students' perspective. An overall rating of competence was obtained by averaging the above four ratings.

Only two respondents rated their competence as less than satisfactory and burnout scores for both these respondents were consistently the two highest MBI scores on each of the three subscales. Whilst consistent with the hypothesis that low well-being/high burnout is associated with perceptions of low competence, these two respondents were removed from the subsequent analyses because they could give undue weight to the investigation. The remaining respondents all rated how well they performed in their job (their competence) as either satisfactory, well or very well. Table 3 presents the results of a series of one-way ANOVA conducted to determine if burnout or perceptions of control across these three categories of competency differed significantly. In each analysis, as ratings for competency increased mean scores for burnout decreased. Importantly, significant differences were found on the Depersonalization subscale and the Personal Accomplishment subscale of the MBI for each of the four analyses indicating a significant association between self-rated well-being and self-rated competence. Additionally, respondents who rated their competence in the highest category had for three of the four analyses significantly higher mean PCOISS scores, signifying a positive correlation between competence and self control of inner states.

Finally, overall competence was significantly and meaningfully correlated with the PCOISS score ($r = .27$), and the MBI subscales of Depersonalization ($r = -.29$) and Personal Accomplishment ($r = .48$).

Table 3
Coping and Burnout Comparisons for categories of respondent's self-rated competences from four perspectives.

Means)		PCOISS	MBI	(Subscale	
	n	Mean	EE	DP	
How well do you do your job?					
From respondent perspective:					
Satisfactory	18	84.50	24.11	5.89	
Well	90	84.57	23.23	6.94	
Very Well	42	93.98*	18.93	3.26**	
From supervisor's perspective:					
Satisfactory	18	76.94	23.56	7.39	
Well	78	86.30	22.60	6.38	
Very Well	46	91.90**	20.33	4.07*	
From colleagues' perspective:					
Satisfactory	26	80.42	23.73	7.35	
Well	79	87.28	23.10	6.66	

Very Well	41	90.23	20.10	3.34**
From client/students' perspective:				
Satisfactory	23	78.00	25.57	8.43
Well	88	86.24	23.39	6.41
Very Well	36	95.24**	17.89*	2.69***

Notes. *n* reflects the number of respondents answering each question. PCOISS = Perceived Control of Inner States Scale. MBI = Maslach Burnout Inventory. EE = Emotional Exhaustion, DP = Depersonalisation, PA = Personal Accomplishment. * $p < .05$. ** $p < .01$. *** $p < .001$

Discussion

This study examines the impact of current work practices and work environments on teachers. Specifically, it investigates perceived competence and well-being in their daily work, perceived states of internal control related to work, and burnout in terms of emotional exhaustion, depersonalization and personal accomplishment. The findings hold implications for teachers at a time when changing socio-culture, political and historical facets have seen simultaneous changes to teaching nationally and internationally. Teachers are expected to continually adapt and keep up with different types and functions of families and schools, transformation in types of work and the nature of employment, as well as new and different information and communication technologies. These factors have the potential to continuously impact on teacher well-being and competence.

While the findings are consistent with the literature that shows competence is related to the sense of Personal Accomplishment a person may receive from his/her work (Brewer & McMahan, 2003), the results break new ground in reporting a negative association between the MBI subscale Depersonalization and competence. These results suggest a new explanation for Depersonalization that could be investigated in future research employing a prospective design, that is, that Depersonalization may arise as a distancing mechanism that seeks to minimize the sense of incompetence that arises from the more difficult human interactions where the worker lacks sufficient skills to bring the interaction to a successful conclusion. This is different from other explanations that have been given for how Depersonalization arises for example, as a way of consolidating resource depletion (Hobfoll & Freedy, 1993), and is consistent with the results recently published by Evers, Tomic and Brouwers, (2004). Given the above finding and the findings of this study, there is a need for further research to test the hypothesis that Depersonalization arises as a distancing mechanism that seeks to minimize a sense of incompetence that arises from difficult human interactions.

The negative association between self-rated well-being, Depersonalisation, and self-rated competence indicates that while these teachers believe they are competent at a 'satisfactory' or 'well' level, many are doing their job in a way that distances themselves from those around them namely, their students and colleagues. It is possible that this may result from expectations placed on teachers today and difficulties associated with the job (Smylie, 1999). Perhaps increasing principal support (Sarros & Sarros, 1992; Taylor & Tashakkori, 1995; Xin & MacMillan, 1999) and reducing teachers' feeling of isolation as well as increasing their self-esteem (Trent, 1997) may alleviate this situation and foster less Depersonalisation and therefore greater well-being among teachers. The above speculation from the current study requires further research using more rigorous designs and instruments. In fact, the analysis and interpretation adopted in this study relies solely on self-reported data for all dependent variables. This may be appropriate for an exploratory study but it means that apparent associations must be verified using independent measures before the results of the present study are adopted.

Almost half the respondents indicated that they thought the effort they were putting into their work was greater than the rewards. Simultaneously, this group reported higher burnout levels on all three MBI scales than those who believed the rewards of teaching outweigh the effort. They also reported a lower mean PCOISS score. That is, they perceived their ability to control their internal state and to moderate the impact of aversive events on their emotions, thoughts and physical wellbeing (Pallant, 2000) to be low. If these states continue, over time they may lead to burnout. However, it is important to note that serious levels of burnout were not evident across the sample. Further longitudinal studies that compare groups with varying levels of stress that may lead to burnout may shed light on conditions or individual traits that are conducive to teaching. Goddard and O'Brien (2003) found that beginning teachers are experiencing burnout in the first 12 months of their career. Findings from such longitudinal studies may be incorporated into teacher education courses to equip pre-service teachers with knowledge and skills to cope with stress and therefore avoid burnout. For example, as Rudlow (1999) suggests they could learn to search for solutions and to analyse problem situations and in doing so avoid burnout and become more competent teachers who will endure. It may also be possible to develop intervention strategies for those currently teaching yet are experiencing low levels of competence.

Limitations and Recommendation

The present study is limited by the relatively small sample size. Dinham and Scott (1996) also experienced a limited response rate in a study that involved a self-report survey. This could mean that those who did respond may have a vested interested in the study and therefore may not be representative of the total mid-career or veteran teacher population. In order for the requisite power needed to conduct more in-depth analyses of the complex issues surrounding stress and burnout in teachers, subsequent investigations will need larger samples. The small sample of this study also makes the drawing of generalizations prohibitive. Never-the-less the findings of this study are informative. In particular, the finding that Depersonalization is associated with lower levels of competence is interesting and consistent with the results of other research (for example, Brouwers & Tomic, 2000). It is recommended this relationship is investigated further, particularly the question of whether Depersonalization may be a distancing mechanism that seeks to minimize the sense of, or experience of, incompetence that may arise from human interactions where the worker lacks sufficient competence to successfully resolve the interaction.

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