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Burnout among Malaysian Teachers in Implementing Curricular Changes

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Abstract

Burnout has been widely reviewed and studied. However, the relationship between teacher burnout syndrome and curricular reform is rarely studied. Thus, the aim here is to report on the burnout syndrome among teachers during the implementation of the curriculum in Malaysia namely Integrated Secondary School Curriculum (ISSC). Two hundred and sixty four secondary school teachers who were involved in the ISSC program completed the Maslach Burnout Inventory (MBI) and the Secondary School Curricular Change Questionnaire (SSCCQ). The stepwise regression results showed that the emotional exhaustion (EE) predictor is overall workload and time sufficiency, depersonalization (DP) predictor is complexity of the ISSC, and personal accomplishment (PA) predictor is ISSC practicality. Preventing this phenomenon in the school system can lead to better retention rates among teachers.

Keywords : *teacher burnout, Malaysia's Integrated Secondary School Curriculum, emotional exhaustion, depersonalization, personal accomplishment*

Introduction

The curricular changes bring a host of problems and challenges that have to be solved effectively (Huang, Cai, Cheng, Kosik, Mandell, Wang, & Fan, 2014). One of the problems resulting from the curricular changes is burnout among teachers. This phenomenon has probably existed at all times and in all cultures

(Kaschka, Korczak, & Broich, 2011) and is conceptualized as resulting from long-term occupational stress, particularly among human service workers, including teachers (Jennett, Harris, & Mesibov, 2003) including commitment to an underlying philosophy of a treatment and professional self-efficacy, were explored. Teachers using one of two different treatment approaches to autism participated: those using Applied Behavior Analysis ($n = 34$). An indication of the size of the burnout problem can be seen in a representative survey carried out by Taylor Nelson Sofres (TNS) Emnid in December 2010, which showed that 12.5% of all the people working in Germany felt stressed in their job (Kaschka, Korczak, & Broich, 2011). In the field of education, the rate at which teachers leave the profession is significantly higher than in other professions (Minarik, Thornton, & Perreault, 2003). Almost 50% of teachers leave their career before they attain their sixth year of teaching (Ingersoll & Smith, 2004). The situation worsens as the number of teachers who left within the first five years ranges from one third to a half (Hanushek, 2007; Ingersoll & Smith, 2003). Most reasons and factors are associated with a lack of administrative support (Blasé, Blasé, & Du, 2008; Lambert, McCarthy, Gilbert, Sebree, & Steinly-Bumgarner, 2006) and an excessive number of tasks (Brown, 2005), which can make teachers suffer from burnout. As a consequence, teacher shortages will lead to an increase in class size and the teaching and learning process will become ineffective.

In this study, the curriculum called Integrated Secondary School Curriculum (ISSC) was introduced to the old curriculum in Malaysia. Gomes (1991), Mukundan and Ahour (2011), Suseela (1994) and Toh (1991) reported that teachers had problems that may lead to burnout. Accordingly, there was a rapid increase in the number of senior teachers applying for early optional retirement due to stressful working conditions (Minarik et al., 2003). As subsequent thoughts about leaving one's job and actual leaving are significant predictors of teacher burnout (Jackson, Schwab, & Schuler, 1986) especially in human service occupations, but empirical data about burnout are relatively scarce. We report the results of a study designed to test several hypotheses about the burnout phenomenon. Burnout is considered as a three-component syndrome of emotional exhaustion, depersonalization, and feelings of low personal accomplishment. Burnout was hypothesized to be associated with both unmet employee expectations and job conditions. Hypothesized consequences of burnout included and this phenomenon should present itself more prominently after the implementation of the ISSC, there is a need to look into a possible relationship between teachers burnout and the implementation of the ISSC itself. Finally, it has to be pointed out that while teacher burnout has been a much talked about topic, there is little empirical evidence from the

Asian context, particular from Malaysia. Thus, the presented study investigated the relationship between burnout among Malaysian teachers and the curricular changes. It was hypothesized that there was a positive correlation between ISSC and burnout symptoms.

Research Focus

The presented study is an exploratory attempt to investigate burnout among Malaysian teachers in a particular context, i.e., the implementation of a major curricular change. More specifically, this study attempts to investigate a possible predictor that contributes to teacher burnout during the implementation of the ISSC by first describing the burnout level in the teachers and secondly, by investigating possible predictors among 20 curricular change implementation variables and the three subscales of burnout, namely emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA).

Research Methodology

The presented study comprised 264 teachers (female, $n = 232$; male, $n = 32$) teaching in forms 3, 4 and 5. The sample comprised 188 teachers (71.2%) who were under 40 years of age and 76 teachers (28.8%) over 40 years of age (average age = 35.7). In terms of the ISSC teaching experience, 55 teachers (20%) had up to 3 years of experience, and 209 teachers (79.2%) had over 3 years of experience. The instruments used in this study were the MBI and SSCCQ. The MBI consists of 22 items and each is rated for its intensity. The intensity is rated from 1 (very mild and barely noticeable) to 7 (major and very strong). The respondent scores 0 (zero) if the feeling or attitude described is never experienced. Item scores are summed to obtain subscale scores. The mean for each of the subscales can also be found. The SSCCQ is a four-section self-administered survey questionnaire. Section A consists of nine items, designed to provide information on respondents' background, such as gender, educational qualifications, length of teaching experience and preferences for teaching. Section B consists of 30 items on the 15 variables of the curricular change implementation. Section C is the MBI and section D consists of three items on the remaining three curricular change implementation variables. In addition, section D also contains one open-ended item asking respondents to list three of the most problematic hindrances to their implementation of the ISSC.

There is another open-ended question soliciting respondents' comments on the implementation of the ISSC. There were 20 curricular changes implementation variables, of which 3 (gender, ISSC implementation clarity and ISSC implementation flexibility) were treated as nominal variables while 15 other variables were treated as interval data variables. The variables were chosen for three reasons. Firstly, an initial survey was carried out on fifteen form 3, 4 and 5 teachers. The teachers were interviewed and asked to list 10 variables they found most disturbing in the implementation of the ISSC. Secondly, the variables which repeatedly surfaced in the review of the literature on ISSC implementation as problematic ones were given priority. Thirdly, if a variable was found to be related to both teacher burnout and curricular change implementation in the literature review, it was also given priority.

The SSCCQ was expert-validated. The Cronbach α reliability coefficient was 0.88 for EE, 0.81 for DP and 0.72 for PA. The subscales showed good internal consistency. T-test analysis and stepwise multiple regressions were used to analyze the relationship between the three burnout subscales and the variables. The analyses used depend on the type of independent variables (nominal or interval data). T-test analysis was used for the nominal independent variable only, whereas stepwise multiple regressions were applied to all the 20 independent variables.

Research Results

Level of Burnout

The scores of the whole sample for EE, DP and PA burnout were examined in terms of the percentage of teachers in the low, moderate and high level of burnout for the three subscales. This was achieved in the categorization of MBI scores by Maslach and Jackson (1981). As can be seen in Table 1, 20.1% of the teachers in the sample showed a lower level for EE burnout, 46.2% showed a moderate level and 33.0% a high level. For DP burnout, 31.4% showed a lower level and 29.9% a high level. For PA burnout, the figures are 12.1%, 33.0% and 54.9%, respectively.

Based on the above results, the percentage of high-burnout teachers implementing the ISSC was the highest for the PA subscale and the lowest for DP. The results also showed that the percentage of low-burnout teachers was the lowest for PA and the highest for DP. It is, thus, pertinent to note that while the sample registered the highest mean for EE, a higher proportion of the teachers were burnt out in the PA subscales than those in the other two subscales.

Table 1. Percentage of Malaysian Teacher Sample (N=264) in the low, moderate and high level Burnout based on Maslach's Categorization of Scores

MBI Burnout Subscale	Range of Experience Burnout		
	Low (Lower third)	Moderate (Middle third)	High (Upper third)
EE	20.1%	46.2%	33.7%
DP	31.4%	38.6%	29.9%
PA	12.1%	33.0%	54.9%
Total	1.9%	86.0%	12.1%

Using Maslach and Jackson's (1981) criteria while considering all the three subscales together, it was found that 1.9% of the teachers were at the lower level for all the three subscales, 86.0% were at the moderate level of burnout and 12.1% were at the high level of burnout. This means that as many as 12.1% of the teachers in the sample were deemed to experience an overall high burnout.

Differences of Burnout with Two sub-groups of the Nominal Independent Variables

T-test was used to test for significant difference in the mean scores for the EE, DP and PA burnout of the two sub-groups of the nominal independent variables. Table 2 shows the results.

Table 2. T-test Comparisons of Mean Burnout scores by Nominal Independent Variables

Variables		EE		DP		PA	
		Mean (±Stddev)	P-Value	Mean (±Stddev)	P-Value	Mean (±Stddev)	P-Value
Gender	Male	3.71 (±1.25)	0.54	2.57 (±1.15)	0.03*	2.71 (±0.61)	0.50
	Female	3.86 (±1.24)		2.06 (±1.27)		2.63 (±0.84)	
Age	< 40 years	3.83 (±1.28)	0.89	2.28 (±1.29)	0.00*	2.71 (±0.84)	0.01*
	≥ 40 years	3.85 (±1.13)		1.74 (±1.09)		2.44 (±0.73)	
ISSC Teaching experience	< 3 years	3.79 (±1.43)	0.76	2.27 (±1.37)	0.37	2.78 (±0.75)	0.17
	≥ 3 years	3.85 (±1.19)		2.09 (±1.23)		2.60 (±0.83)	

Variables		EE		DP		PA	
		Mean (±Stddev)	P- Value	Mean (±Stddev)	P- Value	Mean (±Stddev)	P- Value
ISSC Imple- mentation of Clarity	Clear	3.78 (±1.20)	0.13	2.04 (±1.23)	0.03*	2.54 (±0.79)	0.00*
	Unclear	4.11 (±1.38)		2.52 (±1.36)		3.08 (±-)	
ISSC Imple- mentation of Flexibility	Flexible	3.62 (±1.19)	0.00*	1.93 (±1.18)	0.00*	2.54 (±0.77)	0.01*
	Inflexible	4.39 (±1.21)		2.61 (±1.33)		2.87 (±0.89)	

*= significant at p<0.05

As shown in Table 2, the male teachers have a DP burnout mean of 2.57 and standard deviation of 1.15, whereas the female teachers have a DP burnout mean of 2.06 and standard deviation of 1.27. The p-value of 0.03 is significant at $p < 0.05$. Hence, the results show that there is a significant difference between the DP burnout mean of the male and female teachers. The results also show that there is no significant difference between the EE and PA burnout means of the male and female teachers. As far as age is concerned, the teachers aged below 40 and over 40 are significantly different in DP and PA (p values 0.00 and 0.01 respectively), but not in EE burnout (p value 0.89), while for ISSC teaching experience, there is no difference between the teachers with more than 3 years of ISSC experience compared to the teachers with less than 3 years of ISSC experience in all the three subscales (p values 0.76, 0.37 and 0.17 respectively for EE, DP and PA).

Table 2 also shows that there is no significant difference between the group of teachers that were of the opinion that the implementation of ISSC was clear and the teachers that thought that the implementation of ISSC was unclear concerning their EE burnout. However, the two groups differ significantly for the other two subscales. The last nominal variable, which is ISSC implementation of flexibility, on the other hand shows that the two groups are significantly different in all the three burnout subscales.

Result of Stepwise Regression

Three sets of stepwise multiple regression analysis were carried out using EE, DP and PA burnout as criterion variables and all the variables (20) as predictors. For each of the burnout subscales, the regression method employed allows for a prediction equation for those burnout subscales to be formulated by choosing

one component at a time, first choosing the component that is the best predictor. The variables were then added step-by-step until no other variables would make a significant contribution to the prediction equation. For the inclusion of variables in this stepwise mode, the minimal F-value was 0.05 and the tolerance level was 0.0001.

Table 3 presents the results found to be significant in the step-wise regression analysis using EE burnout as the criterion variable and all the variables as predictors.

Table 3. Stepwise Regression Analysis of Emotional Exhaustion (EE) Burnout as Criterion

Significant Predictor Variables	Multiple R	R Square	Adjusted R Square	Beta
Overall Workload	.41	.17	.16	.24
Time Sufficiency	.46	.21	.04	.19
ISSC Flexibility	.49	.24	.02	.13
ISSC Complexity Implementation	.51	.26	.01	.14
Collegial Support	.53	.28	.01	.12

As seen in Table 3, the overall workload is the best single predictor of EE burnout and accounts for about 17% of the total variance of EE burnout. The table also shows that time sufficiency together with overall workload account for about 21% of the total variance of EE burnout. When the third predictor, ISSC flexibility, is added to the prediction equation, the total variance accounted for is about 24%. The inclusion of the last two predictors, i.e., ISSC complexity and collegial support account for approximately another 4% of the total variance. The remaining 72% of the total variance of EE burnout is not accounted for.

Table 4 presents the results found to be significant in the stepwise regression analysis using DP burnout as criterion variable and all the variables as predictors.

Table 4. Stepwise Regression Analysis using Depersonalization (DP) Burnout as Criterion

Significant Predictor Variables	Multiple R	R Square	Adjusted R Square	Beta
ISSC Complexity Implementation	.28	.08	.79	.24
ISSC Flexibility	.33	.11	.02	.16
Support from Principal	.36	.13	.01	.16
Gender	.39	.15	.01	-.13

ISSC complexity implementation was the best single predictor of DP burnout and it accounted for about 8% of the total variance. Together with ISSC flexibility, the total variance accounts for about 11% of DP. Another 2 variables that contribute significantly to the variance of DP burnout are support from principal and gender. As can be seen in the above table, when those predictors are added to the prediction equation, the total variance accounted for is about 15%.

As indicated in Table 5, ISSC practicality is the best single predictor of PA burnout and alone accounts for about 9% of the total variance of PA burnout. The data also show that ISSC conceptual clarity contributes to about 3% to the total variance of PA burnout. Three other significant predictors found are ISSC implementation-clarity, overall workload and sufficiency of physical amenities, which contributes to about 1% of the total variance of PA burnout. Together, all the five predictors account for about 15% of the total variance of PA burnout.

Table 5. Stepwise Regression Analysis Using Personal Accomplishment (PA) Burnout as Criterion

Significant Predictor Variables	Multiple R	R Square	Adjusted R Square	Beta
Practicality	.30	.09	.08	.20
Conceptual Clarity	.35	.12	.03	.15
Implementation Clarity	.37	.13	.01	.14
Overall Workload	.39	.14	.01	-.18
Physical Amenities	.41	.15	.01	.13

As in the case of both EE and DP burnout, a large portion of the variance (85%) is unaccounted for. It appears that although the above five predictors account for about 15% of the total variance of PA burnout, there may be other variables which have to be considered when one attempts to predict the PA burnout of the teachers of forms 3, 4 and 5 in implementing curricular change in national secondary schools.

Discussion

As indicated in this paper, approximately one-third of the teachers suffered from burnout to a high degree for both the EE and DP subscales and more than half of the teachers suffered from burnout to a high degree in terms of PA (Table 1). In terms of EE burnout, out of 17 variables, 12 variables show a significant

relationship in Pearson product-moment correlation analysis. The variables are (i) overall workload, (ii) time sufficiency, (iii) non-teaching task hampering, (iv) ISSC complexity implementation, (v) salary sufficiency, (vi) handling curriculum and co-curriculum duties, (vii) clerical workload, (viii) diversity of students, (ix) collegial support, (x) sufficiency of teaching material, (xi) effectiveness of training and (xii) sufficiency of physical amenities. Out of these 12 variables, 4 variables appear as predictors in the stepwise multiple regressions, which are (i) overall workload, (ii) time sufficiency, (iii) ISSC complexity implementation and (iv) collegial support.

The result (Table 2) shows that there are significant differences between two sub-groups: the teachers that think that ISSC implementation is flexible (mean score 3.62) and the teachers that think that ISSC implementation is not flexible (mean score 4.39) in all the three burnout subscales and it means that ISSC flexibility is significantly related to the burnout subscales and in line with the results in stepwise multiple regression.

These results show that out of 20 variables, overall workload, time sufficiency, ISSC flexibility, ISSC complexity implementation and collegial support significantly contribute to the variance of EE burnout. This is not surprising that these variables are predictors of EE burnout, as by definition, EE burnout refers to feelings of physical and emotional exhaustion and ennui as a result of daily work pressure and time constraints.

DP burnout shows a significant relationship with 9 interval data variables, i.e.: (i) ISSC complexity implementation, (ii) clarity of ISSC concept, (iii) effectiveness of training, (iv) ISSC practicality, (v) collegial support, (vi) overall workload, (vii) age, (viii) support from principal and (ix) sufficiency of teaching material, with coefficient values 0.28, 0.23, 0.23, 0.19, 0.19, 0.16, 0.15, 0.15 and 0.15, respectively. In line with this result, 2 variables that are ISSC complexity implementation and support from principal are predictors in stepwise analysis (Table 5). Another 2 variables that appear as predictors, i.e., ISSC flexibility and gender, are nominal independent variables. As mentioned above, ISSC flexibility is related to all the three burnout subscales based on t-test analysis. As far as gender is concerned, only DP burnout shows a significant difference between the male and female teachers.

The results of the stepwise multiple regression analysis indicate the predictors of PA: ISSC practicality, conceptual clarity, implementation clarity, overall workload and physical amenities (Table 5). These variables, except implementation clarity, were found to have a significant relation in correlation analysis. The coefficients values are 0.30, 0.29, 0.15 and 0.15, respectively. Consistent with stepwise analysis,

the implementation clarity variable shows a significant difference between two sub-groups of teachers: the teachers who think that ISSC implementation is clear and those who think that ISSC implementation is not clear.

Only the ISSC teaching experience variable, which shows no association with any of the three subscales of burnout and our findings, is consistent with the study by Bayani, Bagheri and Bayani (2013), which found no difference in burnout between teachers with less teaching experience and teachers with more teaching experiences. These findings are inconsistent with the study of Duli (2016) and also Tjiddink, Vergouwen and Smulders (2014). One possible reason is the teachers in this study do not differ much in experience with the new ISSC implemented in the school system of Malaysia. Another possible explanation for these findings is that the teachers, both novices and veterans, were having difficulty with the implementation of the change for some reason or another.

The presented study indicates that teacher burnout is related to the ISSC implementation, bringing with it several implications. First, this finding signifies that there is a need to be cautious when introducing curricular changes in the future. Serious considerations have to be made before a decision to adopt a curricular change in an attempt to avoid teacher burnout. For example, teachers' job scopes or teaching duties should be designed to be more focused, i.e., they should include either curriculum or co-curriculum duties, but not together. Another consideration is to reduce non-teaching tasks such as landscaping or supervising gardeners. Furthermore, it is recommended that both pre-service and in-service teachers should attend training for coping with teacher burnout.

Conclusions

To summarize, the results of the presented study suggest that overall workload is central to the other variables. As in previous studies, the three components of burnout are related to the work stress caused by overall workload (Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011). It seems appropriate for the curricular change planners to ensure that "something is taken away every time something is added". This is to ensure that the curriculum does not become a "non-subtractive" one. Ultimately, our findings may be useful in creating intervention strategies of coping with burnout among teachers especially those who face curricular changes.

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