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The Crossover of Burnout and Engagement

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ABSTRACT

This study examined burnout and engagement, which is the hypothesised opposite of burnout, in a sample of construction professional engineers in Hong Kong (N=221). The intercorrelations between the three dimensions of burnout: emotional exhaustion, cynicism and professional efficacy, and the three dimensions of engagement: vigor, dedication and absorption were examined and it was found that only four out of nine intercorrelations fulfilled the criteria for crossover correlation, indicating that the hypothesised crossover relationship between burnout and engagement was only partially supported. However, dedication was observed to be significantly and negatively correlated with all three dimensions of burnout, suggesting that intervention strategies may include development of dedication in particular, aimed to reduce levels of staff burnout and its negative ramifications to both individuals and organisations**.** On the other hand, engineers' professional efficacy is likely to be increased by building upon their engagement that may also help to reduce the risk of exposure to burnout.

KEYWORDS: **Burnout, Construction, Engineers, Engagement**

1. INTRODUCTION

1.1 BURNOUT AND ITS STRUCTURE

Burnout is a metaphor that is commonly used to describe a state of mental weariness. Originally, burnout was considered to occur exclusively in the human services among those who do 'people work' of some kind (Maslach and Schaufeli, 1993). However, gradually it became clear that burnout also exists outside the human services (Maslach and Leiter, 1997). Consequently, the original version of the Maslach Burnout Inventory (Maslach and Jackson, 1986) was adapted for use outside the human services and this new version was called MBI-General Survey (MBI-GS). The three dimensions of the MBI-GS parallel those of the original MBI, in the sense that they are more generic and do not refer to other people one is working with. The first dimension 'emotional exhaustion' measures fatigue without referring to other people as the source of one's tiredness. The second dimension 'cynicism' reflects indifference or a distant attitude towards work in general, not necessarily with other people. Finally, 'professional efficacy' encompasses both social and non-social aspects of occupational accomplishments. In the present study, the MBI-GS is used to measure burnout, high scores on exhaustion and cynicism, and low score on professional efficacy are indicative of burnout.

1.2 ENGAGEMENT AND ITS STRUCTURE

Engagement is assumed to be the positive antipode of burnout as such Maslach and Leiter (1997) describe as energy, involvement and efficacy - these are the direct opposites of the three dimensions of burnout.' From the scholars' perspective, burnout is an erosion of engagement, whereby 'energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness'. Therefore, according to Maslach and Leiter (1997), job engagement is assessed by the opposite pattern of scores on the three dimensions of burnout. In other words, low scores on exhaustion and cynicism, and high score on professional efficacy are indicative of job engagement. Hence, burnout and engagement are considered to be the opposite poles of a continuum that is entirely covered by the MBI. However, this way of using the MBI as a bipolar instrument that assesses burnout as well as engagement is rather questionable in view of the debate on the polarity of positive and negative affect (Diener, 1999). For example, based on secondary analyses of a set of earlier studies, Russell and Carroll (1999) showed convincingly that positive and negative affect are independent states, rather than two opposite poles of the same bipolar dimension. Base on this rationale, it could be argued that instead of being

two opposite poles burnout and engagement are independent, yet negatively correlated states of mind.

1.3 IMPLICATIONS OF BURNOUT

Burnout contributed to by job demands has been demonstrated to directly threaten individuals' mental and physical health. Common symptoms of mental disorders may include psychological distress, anxiety, depression, reduced self-esteem and substance abuse (Maslach et al., 2001; Tang et al. 2001); whereas physical disorders may include headache, stomachache and sleep disturbance (Appels and Schouten, 1991; Burke and Greenglass, 1988; Tennant, 1996). These stress-related symptoms are claimed to be common causes for sick-leave absenteeism and an increased risk of future illnesses (Toppinen-Tanner et al., 2005). In work environments, individuals suffering from job burnout are likely to be experiencing high levels of job tension and uncertainty (Maslach et al, 2001), while at the same time, experiencing low levels of motivation and job satisfaction (Schaufeli and Enzmann, 1998). They generally display a negative attitude towards work engagement and commitment within their organisations. As a result, the performance at work, in terms of productivity and effectiveness, is likely to be affected. Recent research suggests that burnout is a significant predictor of intention to change jobs (Yip et al., 2005). However, employees, subject to high levels of burnout, may remain at their posts due to lack of acceptable alternative, potentially posing problems of change in their attitude and work effort, resulting in a downward trend in performance.

Employees are held to be one of the most valuable assets in an organisation and it often has a substantial investment in their education, professional accreditation and skills. Therefore, when experienced and competent employees voluntarily leave an organisation, the business would normally have to bear the costs and the loss of capital investment, i.e. the costs of recruitment, re-training and replacing personnel. Having identified the adverse effects of burnout previously described, it may not then be surprising to learn that employee burnout contributes to negative ramifications on organisational effectiveness; in terms of tangible and non-tangible implications (Wright and Bonett, 1997). Clearly, from the organisational perspective, the fiscal results of the organisation may be adversely affected by the burnout phenomenon, either because of a general negative attitude towards work or equally as damaging those caused by changes in the behavior of individuals, resulting in high levels of absenteeism and ultimately staff turnover.

The financial costs, both tangible and intangible, of job burnout not only affect the organisation where the phenomenon is present but also the industry within the economy to which it contributes. Where burnout is widespread, the construction industry is therefore likely to reduce its overall efficiency, this in turn threatens the long-term competitiveness of the whole sector. It is therefore reasonable to assume that an improvement of

organisational performance through mitigation or minimisation of job burnout is likely to improve the performance of the industry as a whole.

1.4 CAN BUILDING ENGAGEMENT PREVENT BURNOUT?

Maslach, et al. (2001) suggested that engagement is likely to be the positive antipode of burnout. Organisational interventions in relation to building employees' engagement should, in theory, prevent or minimise burnout, together with the detrimental effect it can have on individuals, organisations and industry as a whole. Nevertheless, empirical research investigating the relationship between engagement and burnout for the purpose of proving this supposition has been largely neglected, especially within the context of the construction industry. Indeed, Bakker et al. (2005) examined the crossover relationship between burnout (emotional exhaustion and cynicism) and work engagement (vigor and dedication) and found that the results among different sub-scales were not consistent. Both public and private organisations tend to invest substantially designing in-house training programmes or encouraging employees to enrol in external courses, specifically designed to build on their team spirit and enhance active engagement. For example, Leiter and Maslach (1997) designed a comprehensive programme for organisational renewal, aiming at building upon engagement. Despite this and other such programmes, there is a distinct absence of scientific quantification regarding the effectiveness that increasing work engagement can actually reduce the negative effects of job burnout. With the stated position, one may question the hypothesis and ask the question: 'Can building engagement prevent burnout?'

1.5 RESEARCH OBJECTIVE

The objective of the present study is to investigate fully the intercorrelations between the three dimensions of burnout: emotional exhaustion, cynicism and professional efficacy, and the three dimensions of engagement: vigor, dedication and absorption among a sample of construction professional engineers in Hong Kong, aiming to evaluate preliminary the conceptual crossover relationship between burnout and engagement. Acquisition of this knowledge will contribute towards future research in assessing whether or not organisational intervention strategies for migrating or minimising burnout and its negative effects through building engagement is likely to be successful.

2. METHOD

2.1 SAMPLES AND PROCEDURE

A web-based self-administered questionnaire was developed to obtain data from corporate members of the Hong Kong Institution of Engineers (HKIE) in construction related disciplines i.e. building, building services, civil, geotechnical and structural. In 2005 the HKIE distributed e-mail invitations to the corporate members inviting participation of the survey. The invitation was also posted within the website of the HKIE. An included web addressed hyper-link allowed access to the questionnaire which was designed to be completed and submitted online.

A total of 222 completed questionnaires were returned. The nature of the survey prohibited the calculation of the response rate. Of the 222 respondents, 205 (92.76%) were male and 16 (7.24%) were female. The mean age of the respondents was 40.80 years (SD= 9.78). The mean average hours worked per week were 51.72 hours (SD = 10.59) and the mean average hours worked outside specified hours were 10.60 hours (SD = 10.37).

2.2 INSTRUMENTS

Burnout was measured using the Maslach Burnout Inventory – General Survey (Maslach *et al*., 1996). This 16-item inventory comprises three sub-scales assessing emotional exhaustion (I feel emotionally drained from my work), cynicism (I have become less interested in my work since I started this job) and professional efficacy (At my work, I feel confident that I am effective at getting things done). The items for the third dimension of burnout are framed in positive terms and thus a low score of professional efficacy reflects a high level of burnout. Items were rated on a 7-point scale ranging from 0 (never) to 6 (every day).

Engagement was measured using the Utrecht Work Engagement Scale (Schaufeli and Bakker, 2003). This 17-item inventory comprises three sub-scales assessing vigor (At my work, I always persevere, even when things do not go well), absorption (When I am working, I forget everything else around me) and dedication (I find the work that I do full of meaning and purpose). Items were rated on a 7-point scale ranging from 0 (never) to 6 (every day).

3. RESULTS

As theoretically expected, all interrelations of the engagement scales were highly positive correlated: vigor and absorption (r = .769, p = .000), vigor and dedication (r = .777, p = .000), absorption and dedication (r = .659, p = .000, p = .000). However, only two out of three of the interrelations of the burnout scales were positive correlated: emotional exhaustion and cynicism (r = .551, p = .000), cynicism and professional efficacy (r = .241, p = .000), whereas the interrelation between emotional exhaustion and professional efficacy was not significant. On the other hand, interrelations between burnout and engagement scales were mostly negative: emotional exhaustion and dedication (r = -.216, p = .001), cynicism and vigor (r = -.319, p = .000), cynicism and dedication (r = -.447, p = .000), reduced professional efficacy and vigor (r = -.692, p = .000), reduced professional efficacy and absorption (r = -.574, p = .000), reduced professional efficacy and dedication (r = -.680, p = .000). To a surprise, emotional exhaustion and absorption were found to be positively correlated (r = .144, p = .034). Correlations between emotional exhaustion and vigor, and between cynicism and absorption were not significant in this study. Of the burnout scales, emotional exhaustion was least strongly related to the engagement scale, particularly absorption, whereas professional efficacy was most strongly related to these scales. Of the engagement scales, dedication was particularly strongly negatively related to all three dimensions of burnout. The mean scores of the three dimensions of engagement (range: 3.847 to 3.619) were found to be more consistent than that of the three dimensions of burnout (range: 2.596 to 3.776). The descriptive statistics and correlations between Maslach Burnout Inventory-General Survey (MBI-GS) and Utrecht Work Engagement (UWES-S) are shown in Table 233.1.

Table 233.1 – Descriptive statistics and correlations between Maslach Burnout Inventory-General Survey (MBI-GS) and Utrecht Work Engagement (UWES-S)

	Mean	SD	1	2	3	4	5	6
1. Emotional exhaustion	3.093	1.641	-					
2. Cynicism	2.569	1.444	.551***	-				
3. Reduced professional efficacy	3.776	1.046	.098	.241***	-			
4. Vigor	3.619	1.173	-.058	-.319***	-.692***	-		
5. Absorption	3.847	1.151	.144*	-.125	-.574***	.769***	-	
6. Dedication	3.630	1.511	-.216**	-.447***	-.680***	.777***	.659***	-

Notes:
1. Person product-moment statistics, pairwise. N = 222.
2. Items are scored on a 7-point Likert-type scale: 1 = strongly disagree, 7 = strongly agree.
3. *p < .050, **p < .010, ***p< .001.

4. DISCUSSION

Vigor, absorption and dedication were highly dependent on each other as demonstrated by all inter-item correlations of the engagement scales being highly and significantly correlated, implying that the engagement scales were found to be validated among the sample. On the other hand, of the burnout scales, only the inter-item correlation between emotional exhaustion and cynicism and that between cynicism and reduced professional efficacy were found to be significant, whereas that of emotional exhaustion and reduced professional efficacy was not significant, indicating that further validation of the burnout scale is suggested in future applications among the population. Notwithstanding this weakness, the intercorrelations between the three dimensions of burnout and three dimensions of engagement were inconsistent, only partially supporting

Schaufeli et al's (2004) preposition that all the crossover correlations between the three dimensions of burnout and three dimensions of engagement should be significant and negatively correlated with coefficient of correlations at least .400. Based on these criteria, only four out of nine crossover intercorrelations fulfil, whereas another two intercorrelations were not significant. This reveals that the crossover relationship between burnout and engagement is only partially supported, implying that building engagement may not effectively prevent burnout among this sample. However, the findings that all three dimensions of engagement were all significantly, highly and negatively correlated with reduced professional efficacy are promising, suggesting that building engagement in general is likely to, at least, heighten the level of professional efficacy. This is an important issue as construction professionals in Hong Kong have been identified to possess a vigorous sense of the self-worth and self-esteem in their professional capacities (Yip et al, 2005), and that reduces the risk of exposure to burnout and its detrimental effects on individual professionals and the organisations to which they belong.

It is observed that dedication demonstrated significant and negative correlations with all three dimensions of burnout. In this respect and, given limited organisational investment resources and productive engineering management time, organisations should be encouraged to focus on strengthening dedication and the engineering personnel's sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al, 2002), which should prove a much more efficient method to minimise burnout than attempting to include all three dimensions of engagement, i.e. vigor, dedication and absorption, into an intervention programme. In a border perspective, dedication is particularly important for construction professionals to enable them to be mentally well equipped with particularly strong involvement that moves one step further than the usual level of identification, which may also assist them in coping with the high levels of stress stemming from a typical construction project (Haynes and Love, 2004).

5. CONCLUSION

The conceptual crossover relationship between burnout and engagement is only partially supported in the present study, leading to the perception that intervention strategies in preventing burnout by building employees' engagement is in question. Instead, developing employees' dedication is more likely to succeed in minimising staff burnout and its associated negative impact. Nevertheless, construction professionals tend to evaluate themselves positively and are satisfied with their accomplishment at work upon building engagement and that may also reduce their experience of burnout in another arena.

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