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Worker Wellbeing in Malaysia: Prediction of Wellbeing from Psychosocial Work Environment, Organizational Justice and Work Family Conflict

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Abstract

The current study investigates if psychosocial work environment, organizational justice and work family conflict predict Malaysian workers' wellbeing. The current study expands previous research by assessing wellbeing using composite measures of job satisfaction, life satisfaction, positive affect and negative affect as well as job affective wellbeing, psychological and spiritual wellbeing. One thousand one hundred and sixty five Malaysian workers in the manufacturing sector (551 men, 614 women, age range: 18-59 years) answered questionnaires. Hierarchical multiple regression analyses indicated that psychosocial work environment, organizational justice and work family conflict predicted wellbeing. With regard to ethnic and cultural differences in wellbeing, Indian-Malaysians reported significantly higher levels of wellbeing compared to Malays. However, Chinese-Malaysians were not different from Indian-Malaysians or Malays. There was no significant gender difference on wellbeing. The interpretation of this cultural difference requires caution due to the small number of Indian-Malaysians in the sample.

This research investigates the predictors of employee wellbeing in Malaysia, that is, whether the psychosocial work environment (job control, psychological job demands, social support), organizational justice (procedural, interactional, distributive) and work family conflict can reliably predict levels of employee wellbeing. In the work place, employees are the most valuable asset to the organization. Their dissatisfaction with their job and life will significantly affect their commitment and dedication to their job, family and organization. This study examines how employees perceive both work and non-work domains affect their wellbeing. Numerous studies have linked wellbeing with: decreased workplace turnover (Wright & Bonett, 2007), physical health (Richman et al., 2005) and high employee performance (Wright & Cropanzano, 2000). As low employee wellbeing can also adversely affect both workers and their organizations, a clear understanding of predictors of worker wellbeing is required to formulate a theoretical framework for understanding worker wellbeing in Malaysia.

Psychosocial Work Environment and Wellbeing

In organizational studies, the Job-Demand-Control (JDC) model (Karasek, 1979) provides the most crucial determinants of work related wellbeing and health (Lindfors, Meretoja, Toyry, Luukkonen, Elovainio & Leino, 2007). This model identifies two essential aspects of work environments: job control (decision latitude) and psychological job demands. Later, Johnson and Hall (1988) proposed an extension of Karasek's (1979) JDC model, resulting in the Demand-Control-Support (JDCS) model. They found that employees in high strain jobs experience high job demands, low job control and low social support.

A review of 20 years of empirical research using Karasek's (1979) JDC model reported that high demands and low control in work environments are associated with lower psychological wellbeing and job satisfaction, burnout and other forms of psychological distress (Doef and Maes, 1999), and significantly impact employee wellbeing (Noblet, 2003). Jobs characterized by high psychological demands and low social support have also been found to have a negative impact on employee mental health, vitality and burnout (Escriba-Aguir & Tenias-Burillo, 2004) and job satisfaction (Huda, Rusli, Naing, Tengku, Winn, & Rampal, 2004). These jobs are also positively associated with anxiety, stress and depression (Edimansyah, Rusli, Naing, Rusli, Winn & Ariff, 2008). In agreement, Escriba-Aguir and Tenias-Burillo (2004) found that low job control and low co-worker support were associated with poor psychological wellbeing, as job control can reduce fatigue in high psychological job demands among nurses (Yperen & Hagedoorn, 2003). Gimeno, Benavides, Benach, and Martinez (2004) indicated that in high strain conditions, high psychological job demands and low job control were associated with higher absenteeism among non permanent employees.

Organizational Justice and Wellbeing

Cropanzano, Bowen and Gilliland (2007) as well as Cropanzano, Byrne, Bobocel, and Rupp (2001) reported that employees appraise the outcomes in the workplace based on three components of justice: distributive, procedural and interactional justice. Examples of distributive justice relate to outcomes such as pay, promotions and professional development (Cropanzano et al., 2001). Examples of procedural justice relate to management practices which rely on consistency, bias suppression, accuracy, correctability, representativeness, and ethicality (Sutinen, Kivimäki, Elovainio, & Virtanen, 2002). Examples of interactional justice concern the quality of supervisor and subordinates interpersonal relationships which may be indicated by the attention, truthfulness and trustfulness of the supervisor in dealing with employees (Sutinen et al., 2002).

Researchers believe that if employees receive fair treatment from the organization, they tend to possess positive attitudes towards their job outcomes and their supervisors (Moorman, 1991). For example, a study on Thai health centre workers showed a clear association between the higher levels of perceived work performance and the levels of perceived support from the organization (Bhathumnavin, 2003). Most studies on organizational justice tend to focus on selected dimensions such as the relational component (Kivimäki, Ferrie, Brunner, Head, Shipley & Vahtera, 2005), distributive and procedural justice (Shamsuri, 2004), as well as procedural and relational justice (Sutinen et al., 2002). The present study measures a composite of three important aspects of justice: distributive, procedural and interactional justice developed by Moorman (1991). Organizational justice is an important predictor of wellbeing because previous research (Kivimäki, Elovainio, Vehtera & Ferrie, 2003) has shown that justice is a new independent aspect of psychosocial environment that needs to be given priority in health and well being promotion.

Work Family Conflict and Wellbeing

Work family conflict is defined as a form of inter-role conflict which occurs when an individual has to face incompatible role pressures from work and family (Greenhaus & Beutell, 1985). There are three forms of work family conflict: time-based, strain-based and behaviour-based conflicts. Time-based conflict refers to overlapping schedules and tasks. Strain-based conflicts indicate mental and emotional strain demands related to the roles and behaviour-based conflicts concern the of acceptability of individuals' behavioural patterns (Rantanen, Pulkkinen, & Kinnunen, 2005). Examples of time based conflict in previous studies are working hours (Greenhaus & Beutell, 1985; Kinnunen & Mauno, 1998), work schedules and shift work (Greenhaus & Beutell, 1985) as well as the responsibility for young children (Hill, 2005). In contrast, strain based conflict arises from lack of supportive work group and organizational culture (Hill, 2005) and low spouse support (Greenhaus & Beutell, 1985).

Various studies consistently show that individuals report higher levels of work family conflict compared to family work conflict (O'Driscoll, Brough, & Kalliath, 2004). In addition, the combination of work and non work life appears essential to accurately evaluate work related psychological wellbeing and has received increasing attention (Brough & O'Driscoll, 2005; O'Driscoll et al., 2004). Indeed, work family conflict was found to be a longitudinal predictor of employee wellbeing and a negative predictor of psychological wellbeing (Brough & O'Driscoll, 2005).

Numerous studies have revealed negative outcomes of work family conflict on individuals, including decreased life satisfaction (Aryee, 1992) and heavy drinking (Ross, Lahelma, & Rahkonen, 2006) as well as negative outcomes for the organization including absenteeism and stress (Chapman, Ingersoll-Dayton, Neal, 1994) and higher turnover intentions (Fuß, Nübling, Hasselhorn, Schwappach, & Rieger, 2008; Haar, 2004). However, the majority of researchers have focused on women respondents in investigating work family conflict studies. Thus, one aim of the present study was to include both men and women respondents, to address concerns that have been raised by several scholars (Bardoel, Cieri, & Santos, 2008; Hill, 2005).

So far, these three variables (psychosocial environment, work family conflict and organizational justice) have been investigated separately. There has been little discussion on the combination of these variables in prior research: work family conflict and psychosocial work environment (Pal & Saksvik, 2008); psychosocial work environment and organizational justice (Lawson, Noblet, & Rodwell, 2009). Similarly, most studies

on employee wellbeing in Malaysia have only been carried out among professional (Ahmad, 1996), professional-academic and secretarial-clerical (Noor, 2002) workers, thereby mainly focusing on women. Thus, the present study accommodates the need for research on blue collar workers as noted by Sparks et al., (2001) and Oil-ling Siu (2004).

In the Malaysian workplace, workers' wellbeing is examined from a composite of workers' job satisfaction (Makikangas & Kinnunen, 2003; Noor, 2004), job affective wellbeing (Daniels, 2000), life satisfaction (Gallagher & Vella-Brodrick, 2007; Noor, 2006), positive and negative affect (Gallagher & Vella-Brodrick, 2007; Noor, 2006), psychological wellbeing (Fujishiro, 2005; Noor, 2002) and spiritual wellbeing (Robert, Young, & Kelly, 2006). By including this comprehensive range of wellbeing measurements, the current study aims to develop a prediction model of worker wellbeing that captures a broad dimension of workers wellbeing relevant in the socio cultural context of Malaysia.

The present study investigates whether psychosocial work environment, organizational justice and work family conflict, can reliably predict wellbeing among Malaysian workers. Specifically, it was hypothesized that psychosocial work environment (psychological job demands, job control and social support), organizational justice and work family conflict would predict the employee wellbeing.

Method

Participants

A sample of 1165 Malaysian manufacturing employees including 551 men (47.3%) and 614 women (52.7%) were recruited. Their ages ranged from 18 to 59 years, with 24.1% between 18-29 years, 46.4% between 30-39 years, 27.3% between 40-49 years, and 2.2% between 50-59 years. The ethnic backgrounds of participants were: Malay ($n=972$, 83.4%), Chinese ($n=82$, 7%), Indian ($n=102$, 8.8%) and others ($n=9$, 0.8%). Regarding marital status, 74.4% ($n=867$) were married, 22.4% ($n=261$) were single. The remainder includes: 2% divorced ($n=23$), 1% widowed ($n=12$) and 0.2% ($n=2$) did not report marital status. Out of 1165 respondents, 43.9% ($n=511$) were assembly or frontline workers, 35.4% ($n=412$) were supervisors (i.e. foreman or woman, team leader), whereas, 20.5% ($n=239$) were managers. Three respondents (0.3%) did not indicate their employment level. The majority of respondents' (45.8%, $n=533$) highest level of education was secondary school: The Malaysia Certificate Examination (MCE). The remainder of participants completed primary school education and the Malaysia Certificate of Education (LCE) (13%, $n=152$), general certificate (11.3%, $n=132$), diploma (14.5%, $n=169$), first degree and above qualification (15.3%, $n=178$). One respondent (0.1%) did not state his/her education level.

Measures

Demographic Information. The following demographic information was included in the survey: gender, age group, ethnic background (Malay, Chinese, Indian and others), marital status (married, single, divorced, and widowed), number of children, education level (ranged from 1= primary school, 2= the Malaysia Lower Certificate of Education (LCE), 3= the Malaysia Certificate of Education (MCE), 4= Certificate, 5= diploma, and 6= a Bachelor Degree and above). Levels of appointment (1= manager, 2= supervisor/team leader, and 3=assembly workers) and employment status (1= for permanent, 2= temporary, and 3= contract basis) were also measured.

Psychosocial Work Environment. Twenty two items from the Job Content Questionnaire (JCQ), by Karasek (1985) were used to measure psychosocial work environment constructs: job control or decision latitude (9 items), psychological job demands (5 items) and social supports (8 items). JCQ items were scored on a 4 point Likert-type scale, ranged from 1= strongly disagree to 4= Strongly Agree. In the present study, Cronbach's alphas were .60 for job control, .51 for psychological demands and .84 for social support. The low alpha value for the psychological job demands construct is comparable with previous research (Cheng, Luh, & Guo, 2003).

Organizational Justice. The components of organizational fairness measure was adopted from Moorman (1991). This scale contained 18 items with three subscales: the procedural (7 items), interactional (6 items)

and distributive justice (5 items) scales. Responses were made on a 5 point Likert-type scale ranging from 1= strongly disagree to 5= strongly agree. Thus, higher scores represent higher levels of perceived organizational justice. Cronbach's alphas were .91 for total justice, .88 for procedural, .85 for interactional and .93 for distributive justice.

Work Family Conflict. Work family conflict was measured using the Work Family Conflict Scale (Netemeyer, Boles & McMurrian, 1996). The scale consists of two subscales: work to family conflict (WFC) and family to work conflict (FWC). There were 10 items measuring general demand, time and strain conflict. Respondents were asked to give ratings from 1= strongly disagree to 7= strongly agree. Total scores for each subscale could range between 5 and 35, where the higher scores reflect greater perception of conflict. Cronbach's alpha coefficients were .92 for total conflict, WFC and FWC.

The following measures comprised the composite indicators of employee wellbeing:

Job Satisfaction Scale (JSS). The JSS comprise 36 items to assess job satisfaction, using 9 subscales: pay, promotion, fringe benefits, contingent rewards, supervision, co-workers, operating procedures, nature of work and communication. Respondents rated the favorable and unfavorable aspects of their jobs using a 6 point Likert-type scale ranging from 1= Very strongly disagree to 6= Very strongly agree. Higher scores on the JSS indicate higher levels of job satisfaction. The internal consistency of total job satisfaction in this study was .84.

Job Affective Wellbeing. This study adopted a multi dimensional measurement of job affective wellbeing from Daniels (2000). Thirty items represent five aspects of affective wellbeing: anxiety-comfort (A-C), depression-pleasure (D-P), bored-enthusiastic (B-E), tiredness-vigor (T-V) and angry-placid (A-P). Participants rated frequencies of affective responses to each item recalling the previous week "Thinking of the past week, how much of the time has your job made you feel each of the following?" Respondents were asked to rate a score ranging from 1= "You have never felt this way over the past week" to 6= "You have felt like this most of the time". Internal consistencies of the scale for the present sample were all acceptable. Cronbach's alphas ranged between .62 and .83.

Life Satisfaction. The Satisfaction With Life Scale (SWLS) was derived from Diener, Emmons, Larsen, and Griffin (1985) and consisted of 5 items. Respondents indicated the level of agreement or disagreement on a 7 point Likert-type scale ranging from 1= Strongly disagree to 7= Strongly agree. Higher scores indicate greater in life satisfaction. Cronbach's alpha was .82 in the present study.

Positive Affect Negative Affect Schedule (PANAS). The PANAS developed by Watson, Clark and Tellegen (1988) measures general factors, Positive Affect (PA) and Negative Affect (NA), two dominant dimensions in emotional experience. The PANAS can be administered with a variety of time instructions such as "Indicate to what extent you feel this way right now"(or at the present moment, today, over the past few days, this week, the past few weeks, this year or in general). In the current study, respondents were asked to indicate the extent to which they felt each emotion during the past few weeks. The PANAS includes ten items for positive affect (PA) and ten items tapping negative affect (NA), using a 5 point Likert-type scale: ranging (1= Not at all/very slightly, 2= A little, 3= Moderately, 4= Quite a bit and 5= Extremely). Higher scores indicate higher frequencies that respondents feel positive and negative affect: higher scores of PA indicate better functioning and higher scores of NA indicate lower functioning. Cronbach's alphas were .85 (PA) and .87 (NA).

Psychological Wellbeing. The Mental Health Continuum-Short Form (MHC-SF) developed by Keyes (2005) was used to measure psychological wellbeing. The 14 items are comprised of 3 emotional wellbeing items, 5 social wellbeing items and 6 psychological wellbeing items. Respondents indicated how they felt during the past month on a 6 point Likert-type scale: 0= never, 1=once or twice, 2= about once a week, 3= about 2 or 3 times a week, 4= almost every day, and 5= everyday. Since the current study investigated only the overall psychological wellbeing, the six psychological wellbeing items were summed - these represented the most prototypical items in each dimension of psychological wellbeing (Ryff, 1989). Cronbach's alpha for the psychological wellbeing dimension was .85.

Spiritual Wellbeing. The Spiritual Wellbeing Scale (SWB), developed by Paloutzian and Ellison (1982) was used. This scale contains of 20 items with two subscales: religious wellbeing (RWB) and existential well-

being (EWB). Responses are made on a 6 point scale ranging from 1= Strongly agree to 6=Strongly disagree. There were nine negative items requiring reverse scoring. Higher scores indicate greater purpose in life and life satisfaction. Cronbach's alpha coefficients were .87 for total spiritual wellbeing, .82 for religious wellbeing and .74 for existential wellbeing.

All the original English versions of the instruments were translated into Malay and checked through back translation for equivalency. Both translation processes were carried out in consultation with staff from the Psychology and Counseling, and English Departments, at the University Malaysia Terengganu.

Procedure

Approval from the Human Research Ethics committee was obtained. Permission was sought from human resource officers in 12 companies to distribute surveys. The return rate of the questionnaire was 63% (1220 returned out of 1950 surveys distributed). Excluding incomplete questionnaires, 1165 useable questionnaires were coded for analysis.

Results

All statistical inference tests used an alpha level of .05 to determine statistical significance. Both job control and social support were positively correlated with overall employee wellbeing: $r = .15$ and $r = .36$, respectively, whereas, psychological job demands was negatively correlated with wellbeing: $r = -.24$. Although the correlations were small to moderate, these correlations were statistically significant. A moderate significant correlation was found between organizational justice and wellbeing ($r = .40$). As expected, there was a significant negative correlation between work family conflict and wellbeing ($r = -.31$).

Table 1

Means, standard deviations, and correlations between the variables of the study

Variables	M	SD	1	2	3	4	5	6
1. Demands	33.79	4.26	-					
2. Control	37.75	4.75	.07**					
3. Support	23.31	3.37	-.21**	.25**				
4. Justice	60.78	10.01	-.19**	.24**	.55**			
5. Work family conflict	33.77	12.34	.17**	-.06*	-.21**	-.19**		
6. Wellbeing	436.74	48.38	-.24**	.15**	.36**	.40**	-.31**	-

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

Hierarchical multiple regression analyses were carried out to test the hypothesis (Table 2). The predictor variables comprising psychological job demands, job control and social support were entered in the first step of the analyses and accounted 17% of the variance in employee wellbeing, $F(3, 1161) = 77.77$, $p < .001$. In Step 2, organizational justice was added to the model which produced an additional 5% increase in the variance of wellbeing successfully explained. The expanded model at Step 2 explained 21.7% of the variance in wellbeing, $F(4, 1160) = 80.29$, $p < .001$. In Step 3, work family conflict was added to the model resulting in a further 4% increase in the explained variance of wellbeing. The full regression model including all predictor variables was statistically significant, $F(5, 1159) = 80.37$, $p < .001$ and accounted for 25.7% of the variance of employee wellbeing ($R^2 = .257$).

The levels of employee wellbeing in the present study differed by ethnic background as indicated by analysis of variance (ANOVA), $F(3, 1161) = 4.28$, $p = .005$. Furthermore, Scheffe's post hoc tests revealed Indian-Malaysians ($M = 451.22$, $SD = 48.97$, $p = .012$) reported significantly higher levels of wellbeing compared to Malays ($M = 434.61$, $SD = 47.89$). However, Chinese-Malaysians ($M = 443.41$, $SD = 47.80$) were not different from Indian-Malaysians or Malays. There was no statistically significant gender difference regarding wellbeing: men ($M = 436.21$, $SD = 45.99$) and women ($M = 437.24$, $SD = 50.46$), $t(1163) = -.364$, n.s.

Discussion

The current findings supported the hypothesis regarding reliable predictors of employee wellbeing. Upon examination of the direct contribution of psychological job demands, job control and social support as predictors of employee wellbeing, the current findings corroborate the findings reported in the literature (Escriba-Aguir & Tenias-Burillo, 2004; Huda et al., 2004; Noblet, 2003). However, social support, which is a significant predictor of employee wellbeing in the current findings, was not previously recognized in Pomaki and Anagnostopoulou's (2003) study. Social support did not emerge as a significant predictor of wellness/health outcomes in their article. It is possible that a number of methodological differences may have contributed to the inconsistencies in findings with regard to the role of social support on wellbeing. For instance, the measurement of social support in Pomaki and Angnostopoulou (2003) was specifically designed for teachers.

Table 2

Hierarchical multiple regression analyses predicting employee wellbeing using psychosocial work environment (psychological job demands, job control, social support), organizational justice and work family conflict

Predictor	ΔR^2	B	SE B	β
Psychological job demands		-4.864	.711	-.189***
Job control		1.644	.095	.095**
Social support	.17***	4.234	.408	.296***
Psychological job demands		-4.181	.694	-.163***
Job control		1.067	.476	.062*
Social support		2.285	.457	.160***
Organizational justice	.05***	1.310	.153	.271***
Step 3				
Psychological job demands		-3.466	.682	-.135***
Job control		1.021	.463	.059*
Social support		1.871	.448	.131***
Organizational justice		1.219	.149	.252***
Work family conflict	.04***	-.820	.103	-.209***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

In terms of organizational justice as a predictor, the findings are in agreement with Lawson, Noblet and Rodwell (2009) who found that organizational justice was the most effective predictor of wellbeing in their study. Kivimaki et al., (2003) also stated in ensuring the wellness of employees, it is important to emphasize organizational justice aspects such as management procedures and how employees have been treated rather than focus on previous concerns only: work characteristics, social support and personality. The present findings further emphasize the important role of organizational justice in promoting employee health and wellbeing.

Research on employee wellbeing in Malaysia, even in South East Asia, is still scarce. Most studies have been conducted in Western countries such as Australia, UK, USA and several European countries. Research on worker wellbeing in Eastern cultures is underrepresented (Suhail & Chaudhry, 2004). The present findings contribute to the corpus of literature on the reliable predictor variables of employee wellbeing, in particular in Malaysia. In addition, this study has demonstrated the theoretical frameworks used to predict worker wellbeing in Western countries could also be applied in Malaysia, which is a very different socio cultural context. Incorporating Job-Demands-Control-Support variables with additional work and non work (work to family and family to work conflicts) aspects as predictors, the present study has contributed the theory of worker wellbeing since few studies investigate both factors (Loretto et al., 2005).

Contrary to expectations, the current study found a difference between Indian and Malay wellbeing scores. It is difficult to interpret this result, but it might be related to several possible explanations. Malaysia is a multiethnic country that receives world recognition for ethnic integration ("Pengukuhan perpaduan negara," 2010). Being attached with the majority group might cultivate a sense of belongingness and satisfaction (Men-

doza-Denton & Page-Gould, 2008). Similarly, Ng, Lim, Jin, and Shinfuku (2005) also reported that the highest total quality of life scores were among Indians compared to Chinese and Malays in Singapore. However, with a small number of Indian-Malaysians within the sample, the interpretation of this cultural difference requires caution.

The study employed a cross sectional design. Thus, all the data were gathered within a limited period of time. The ability to draw a firm conclusion pertaining to the predictor variables on employee wellbeing would be further strengthened by a longitudinal study. Further research on Malaysian workers' wellbeing outside the manufacturing sector would also help validate the prediction model investigated in the current study. The present study makes a contribution to research on worker wellbeing by combining the three predictors: psychosocial work environment, organizational justice and work family conflict, and expands the indicators of wellbeing in the Malaysian context.

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