

RESEARCH BRIEF

# Mediating Role of Flow in the Relationship Between Job Characteristic and Job Burnout on Work-Family Conflict: A Study on the Hotel Industry in Sarawak

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Studies seem to be in scarcity about the adoption of flow approach in human resource development, particularly within the context of Sarawak, Malaysia; thus, the pressing need to integrate the psychological state in hotel work ambiance (Reeves, 2010). Being categorized as a service industry, career in the hotel industry is indeed challenging and demanding for it requires a great deal of thoroughness, focus, and commitment. Beyond vital job skills, abilities, and knowledge to deliver exceptional service and products to customers, being psychologically positive also has an important role to determine organizational success. Hence, the nature of jobs in the hotel industry may exert a high level of stress, especially when job resources are limited and hostility lurks (Sia, 2001). Thus, by integrating flow experience, which has been defined as an ultimate positive experience and an instance of positive psychology movement that focuses on scientific approach in making normal life more meaningful and fulfilling (Seligman & Csikszentmihalyi, 2000), hotel employees may perceive their work as less stressful even with limited job resources and the presence of hostility. This leads to a feeling of satisfaction and enhanced work performance, as well as intense pleasure upon accomplishing tasks (Csikszentmihalyi & Csikszentmihalyi, 1988). Prior studies revealed that the outcome of applying flow experience include

improved subjective well-being, happiness, life satisfaction, and positive effect (Kasa & Hassan, 2016) and flow is linked to increment in work performance, higher motivation and job engagement, as well as positive mood within the organizational context (Bakker, 2005). Due to the various benefits offered by the flow approach at the organizational level, this study looked into the development of human resource within the organization.

However, a problem arises when the hotel industry fails to enhance or integrate flow as psychological capabilities in generating a conducive service climate (Schneider, Bowen, Ehrhart & Holcombe, 2000). Additionally, flow is relatively a new construct and only a handful of studies have probed into its association from the stance of job demand-resource (JD-R) theory (Makikangas, Bakker, Aunola, & Demerouti, 2010). This study, which is on the premises of the JD-R model (Bakker & Demerouti, 2007), offers results from a different angle with the function of flow as a mediation. Another reason for the selection of this theory as the underpinning theory is due to the central assumption of the JD-R model that every occupation has its own specific characteristic, in which job characteristic and burnout functioned as precursors to job resources and job demand respectively, with work-family conflict as the study outcome. In addition, the study of flow at work in Malaysia on the platform of the JD-R model is

relatively a new area in the hotel setting, so it provides a fresh dimension from the Western context.

Scarcity in literature and inconclusive outcomes from prior studies depict mediation of flow for the correlation between job characteristic and work-family conflict. Hence, it is imminent for future research to focus on the mediation function that derives from the psychological states of flow with job characteristic and work-family conflict (Reeves, 2010) between the antecedents (job characteristic and job burnout) and work-family conflict as the outcome. More importantly, this study portrays a lengthy milestone to discard such uncertainty and to cover the absence of references, especially for Sarawak hotel industry.

Thus, the hypothesis constructed in this study had been based on the assumption that a positive service climate in the hotel industry can be enhanced via psychological capacities (Schneider et al., 2000). Besides, the limited literature that looked into the mediation of flow towards the relationship between job characteristic and burnout with work-family conflict within the Asian context is a motivation for this study. In view of an exhaustive review from the literature, no study has examined the mediating role of flow between the antecedents and the outcomes from the lens of the JD-R model as the underpinning theory. With that, hypothesis 1 (H1) proposes that flow mediates the relationship between job characteristic and work-family conflict, whereas hypothesis 2 (H2) upholds that flow mediates the relationship between job burnout and work-family conflict.

## Methods

### *Research Participants and Procedures*

This quantitative study adopted the purposive sampling method via self-administered questionnaires as instruments, which had been adopted and adapted from prior reliable studies that met the benchmark of reliability value and validity. The required minimum sample should exceed 107 respondents in adherence to the calculation using G\*power 3.1.9.2 (with 2 indicators effect size  $f^2$  0.15 and output of parameter for the actual power at 0.95). G\*Power has been reckoned as a mathematical instrument that accurately calculates the number of population sampling size based on the total number of independent variables for the parameter of power value (Faul, Erdfelder, Lang, & Buchner, 2007). Hence, a total of 293 full-time hotel

employees (194 males and 99 females) from 3- and 5-star hotels had been selected for this study. Their ethnic backgrounds are as follows: Iban (35%), Malay (31%), Chinese (14%), Bidayuh (9%), and others (11%). Meanwhile, the age groups of the respondents are as follows: 21–29 years old (53%), 30–39 years old (30%), and 40–49 years old (16%). A total of four hotels located in Kuching, Sarawak (three 3-star and one 5-star hotels) had voluntarily and anonymously responded with prior approval given to the researcher to carry out this study. In fact, this study was managed by their respective human resource managers, and the process of data collection took approximately three months.

### *Research Instruments*

Prior to the actual study, an exploratory factor analysis had been performed during the pilot study phase to validate the instruments used. A total of 115 valid questionnaires were collected to confirm both the validity and reliability aspects of the instrument by using Statistical Package for Social Science (SPSS) version 22 software.

As a result, no major issue emerged regarding normality and outlier as each item factor loading exceeded 0.40 (Hair, Anderson, Tatham & Black, 1998). The Kaiser-Meyer-Olkin (KMO) test met the benchmark of 0.7, the values of Bartlett's test of sphericity were below 0.5, and all the items displayed significantly varying correlation matrix, in comparison to the matrix identity (Hair et al., 1998). All the instruments demonstrated exceptional validity and reliability scores (Nunnally, 1978), as tabulated in Table 1.

## Results

### *Measurement Model*

In the actual study, the measurement model was assessed to determine the aspect of unidimensionality, as well as the validity and reliability of all variables. All valid 293 questionnaires were screened for an outlier, whereby normality test with skewness and kurtosis score between -2 and +2 (Tabachnick & Fidell, 2007) and outlier below 0.4 indicate nil outlier (Hair, Black, Rabin, & Anderson, 2010). All the items seemed to have met the benchmark of factor loading value of  $>0.5$  (Hair et al., 2010), and all the variables met the benchmark value of 0.5 for average

variance extracted (AVE), which signified exceptional convergent validity (Hair et al., 2010). In addition, all fitness indices, including absolute fit, incremental fit, and parsimonious fit, met their respective benchmark values. The correlation measured for latent exogenous construct was below 0.85, which pointed out that the measurement model was free from redundant items (Kline, 1998). All the tested four variables had Cronbach alpha values exceeding 0.70 (Nunnally, 1978), as well as an acceptable benchmark value of >0.70 for construct reliability (Fornell & Lacker, 1981).

**Structural Model**

All the four variables appeared to have met the benchmark values for all the fit indices (absolute, parsimonious, and incremental fit), hence the model was acceptable (Hair et al., 2010). The factor loading

and AVE also achieved the acceptable values of >0.50 (Hair et al., 2010), whereas the correlation between exogenous constructs met the benchmark value of <0.85 (Hair et al., 2010), and fulfilled the acceptance level of discriminant validity (Awang, 2012). The outcomes of the correlation test value for each latent exogenous construct revealed the absence of violation in the assumption, as portrayed in Table 2. Furthermore, this study discovered that no general factor had been associated with most of the variances, primarily because the findings that differed in the coefficient for all the items had been small or below 0.200. Therefore, the common method variance was absent and presented no issue for this study. As a result, the structural model successfully met the acceptable benchmark of all fit indices, validity, and reliability values, as well as the nil issue in the common method variance.

**Table 1**  
*Validity and Reliability Scores*

Measure	Items	Sources	Factor Loading	KMO	Bartlett Test of Sphericity	Cronbach Alpha
Job Characteristics	15	Hackman & Oldham (1975)	.462 to .829	.679	218.334, p=0.000	.754
Burnout	16	Demerouti & Bakker (2008)	.563 to .781	.744	130.250, p=0.000	.746
Flow	13	Bakker (2008)	.434 to .890	.868	498.052, p=0.000	.878
Work-family conflict	09	Carlson, Kacmar, & Williams (2000)	.687 to .870	.736	209.776, p=0.000	.836

**Table 2**  
*Confirmatory Factor Analysis Result Summary for Discriminant Validity*

Constructs	Burnout	Job Characteristic	Work Family Conflict	Flow
Burnout	1			
Job Characteristic	<b>0.006</b>	1		
Work- Family Conflict	-0.131	<b>0.135</b>	1	
Flow	0.075	0.048	<b>-0.067</b>	1

### **Indirect Effect Method**

The indirect effect had been assessed by, first, the direct effect between the independent and dependent variables to determine the significant effect. In the second step, the mediating variable was embedded into the model to assess the effect if partial or complete mediation had been met (Awang, 2012). Next, Table 3 depicts the summary of the estimate before mediator (Flow) variable was integrated into the model, whereas Table 4 presents the summary of estimate after mediator (Flow) variable upon integration with the model.

### **Hypotheses Testing**

Hypothesis 1, which proposes that flow mediates the correlation between job characteristic and work-family conflict, is not supported. The relationship

between job characteristic and flow had a coefficient estimate value of .032 at  $p = 0.616$  ( $p < .001$  significant level) with its causal direction from job characteristic to flow. Next, the coefficient estimate for the correlation between flow and work-family conflict value was  $-.118$  at  $p = 0.204$  ( $p < .001$  significant level) with its causal direction from flow to work-family conflict. These statistical outcomes indicate that flow is neither complete nor partial mediator for the relationship between job characteristic and work-family conflict. Therefore, this reflects a new finding related to the hotel industry in Sarawak. Byron (2005) mentioned that past researches did not completely investigate the significance of antecedents to work-family conflict and hence, future research is necessary to investigate the relative importance of the other antecedents with flow as the mediator for work-family conflict.

**Table 3**

*Regression Weights (Beta estimate) and P-Value of the Hypothesized Model Before the Mediator (Flow) Variable was Embedded in the Model*

No	Regression Paths			Beta Estimate	SE	CR	P-value	Result
1	Work-family conflict	←	Job Characteristic	.236	.094	2.47	.013	NS
2	Work-family conflict	←	Burnout	-.134	.080	-1.66	-.096	NS

Note: \*\*\*. Correlation is significant at 0.001 level (2-tailed), <sup>NS</sup> Non-significant

**Table 4**

*Regression Weights (Beta Estimate) and P-Value of the Hypothesized Model After the Mediator (Flow) Variable was Embedded in the Model*

No	Regression Paths			Beta Estimate	SE	CR	P-value	Result
1	Work-family conflict	←	Job Characteristic	.236	.094	2.52	.012	NS
2	Flow	←	Job Characteristic	.032	.065	.501	.616	NS
3	Work-family conflict	←	Flow	-.118	.093	-1.27	.204	NS
4	Flow	←	Job Characteristic	.032	.065	.501	.616	NS
5	Work-family conflict	←	Burnout	-.123	.080	-1.52	.127	NS
6	Flow	←	Burnout	.075	.056	1.33	.182	NS

Note: \*\*\*. Correlation is significant at 0.001 level (2-tailed), <sup>NS</sup> Non-significant

**Table 5***Summarized Result for the Hypothesized Relationships; H1 & H2*

No.	Hypotheses Tested	Estimates	Result
1	Flow mediates the relationship between job characteristic and work-family conflict.	.032 <sup>NS</sup> , -.118 <sup>NS</sup>	Not supported
2	Flow mediates the relationship between burnout and work-family conflict.	.075 <sup>NS</sup> , -.118 <sup>NS</sup>	Not supported

Notes: <sup>NS</sup> Non-significant; \*\*\* $p < .05$  (2 tailed).

Hypothesis 2, along with its estimated coefficient, showed no support that flow mediates the relationship between burnout and work-family conflict. The relationship between burnout and flow with a coefficient estimate value of .075 at  $p = 0.182$  ( $p < .001$  significant level) displayed its causal direction from burnout to flow. Next, the coefficient estimate for the relationship between flow and work-family conflict was  $-.118$  at  $p = .204$  ( $p < .001$  significant level) with its causal direction from flow to work-family conflict. Based on the statistical results, flow is neither a complete nor partial mediator for the relationship between burnout and work-family conflict. This also appears to be a novel discovery related to the insignificant relationship of flow as a mediator between burnout and work-family conflict. Table 5 presents the summarized results for the hypothesized relationships.

## Discussion

This study has proven that flow does not mediate the correlation between job characteristic and work-family conflict. Hotel employees felt that the experience of flow does not serve as a mediator and unrelated to job characteristic and work-family conflict too. In fact, most of the respondents displayed high level of flow experience ( $n = 201$ ; 68.6%), which was not affected by job characteristic. Majority of the respondents exhibited at medium level ( $n = 200$ ; 68.3%) of job characteristic which not correlated with work-family conflict with most respondents showcasing medium level ( $n = 172$ ; 58.7%) experienced work-family conflict. Another possible explanation for this insignificant result is due to the flow concept that mirrors the theoretical definitions of job satisfaction and job involvement

(Bakker, 2005). In particular, the flow construct that functioned as a mediator in this study reflected the involvement in an intrinsically motivating momentum within the hotel industry, but uninfluenced by job characteristic or work-family conflict. From the theoretical stance, most hotel employees seemed to display a higher level of flow experience ( $n = 201$ ; 68.6%) and had influenced neither on job characteristic nor work-family conflict.

Second, the statistical outcomes did not support the notion that flow mediates the correlation between burnout and work-family conflict. Surprisingly, this finding contradicts those reported in a prior study, as Byron (2005) asserted that future research should investigate the relative importance of other antecedents of work-family conflict. One possible reason for the insignificant finding is because flow experience is in no way correlated to burnout, and work-family conflict as a conflict is closely related to personality characteristics of each employee. In fact, several personality traits, such as needs and wants, personal motives and values, career preferences, as well as attributes and perception of organization, are associated with individual behavioral outcomes, for instance, job stress, low organizational commitment and engagement, poor work performance, and high turnover intention (Havran, Visser & Crous, 2003; Peterson, 2003; Hoffman & Woehr, 2006; Coetzee, Shreuder, & Tladinyane, 2007). In particular, the insignificant result was retrieved due to personality characteristics. On the other hand, burnout is a dysfunctional condition, which refers to the feeling of overextended and depletion of one's emotional and physical resources (Maslach & Goldberg, 1998). This burnout scenario stems from one's detachment from



various aspects of work. As such, this study revealed that burnout employees had influence neither on flow experience at work nor on work-family conflict.

This study contributes to advancing the theoretical model of JD-R by incorporating flow as the mediator variable. The main focus of the study is on flow as the mediator embedded into the JD-R model to determine the role of flow towards antecedent and outcome. To date, to the researcher's knowledge, only this present study had assessed job characteristic and burnout on work-family conflict, as well as their correlations with the state of flow as mediator. From the contextual perspective, this study only focused on investigating flow experience among employees within the Sarawak hotel industry. The findings obtained may be affected by industry-specific issues at the time of this study being conducted. In particular, the nature of tasks in the hotel industry is mainly routine work that seldom involves cognitive domains or high mental challenging situations. Furthermore, the micro and macro business environments of the hotel industry in Sarawak at the time of this study had been affected by the happenings within the local business setting, as well as the global business sphere.

To address the contextual limitations, it is suggested that future research include hotels outside Sarawak. This will ensure that the possibility of the findings are generalizable to other hotels in Malaysia. In addition, it is necessary to examine the effect of different job characteristics in different departments within the hotel industry, as Nielsen and Cleal (2010) suggested that context is an important determinant for flow. From the methodological perspective of this study, the qualitative research method is recommended to be conducted because flow is a fluid state and is aroused by contextual variables, which by itself is difficult to measure and to be operationalized (Nielsen & Cleal, 2010). For studying this type of variable, data collection via qualitative methods will be more appropriate, which enables the unearthing of more in-depth data from the informants.

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## Declaration of ownership

This report is our original work.

## Conflict of Interest

None

## Ethical clearance

The study was approved by the institution.

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