



**THE MEDIATING ROLE OF SELF-EFFICACY ON THE RELATIONSHIP  
BETWEEN WORK-FAMILY CONFLICT AND ORGANISATIONAL CITIZENSHIP  
BEHAVIOUR**

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**ABSTRACT**

*Organisational citizenship behaviour (OCB) is important in the organisational behavioural research. OCB contributes significantly to the success of an organisation through proactive behaviour in extra-role activity and active involvement in organisation operation to ensure efficiency and productivity in service delivery. The purpose of this study is to examine the relationship between work-family conflict as the antecedent of OCB and the role of self-efficacy as the mediating variable. Data were collected from 510 public administrators at Public Service Department, Ministry of Home Affairs, Ministry of Education and Ministry of Health in Putrajaya, Malaysia. Data analyses were conducted using partial least squares structural equation modelling (PLS-SEM) to test the research model hypotheses related to the relationship between work-family conflict, self-efficacy and OCB. The findings confirmed that there is a significant negative relationship between work-family conflict and self-efficacy and there is no relationship between work-family conflict and OCB. Self-efficacy is proven to be a fully mediation variable in the relationship between work-family conflict and OCB. The results suggest that organisations should be aware of individual characteristics and work-family*

*domain to foster participation and engagement in OCB. The findings of this study contribute to the literature especially on OCB and open new avenues for future research by providing new perspective on factors that influence individual behaviour and also the role of personal efficacy on those relationship.*

**Keywords:** Mediation analysis, Organisational Citizenship Behaviour (OCB), self-efficacy, SmartPLS, work-family conflict.

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## 1.0 INTRODUCTION

Empirical research on organisational citizenship behaviour (OCB) has increased in the past 20 years and has been explored in various settings and contexts. Previously, research on OCB has been largely related to antecedents and outcomes of individual and organisational levels. Organisational citizenship behaviour (OCB) was first coined by Dennis Organ in 1983, which refers to the “extra-role behaviour” among employees introduced by Katz (1964). In 1988, Dennis Organ defined OCB as “individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organisation” (Organ, 1988, p. 4). Later in 1997, Organ redefined OCB as any discretionary work-related behaviour that contributes to the maintenance and enhancement of the social and psychological context that support task performance (Lai, Lam, & Chow, 2015; Organ, 1997).

Previously, OCB used different names such as civic organisational behaviour (Graham, 1991), extra-role behaviour (Van Dyne, Cummings, & McLean Parks, 1995), contextual performance (Motowidlo & Schmit, 1999), perceived organisational membership (Masterson & Stamper, 2003), and compulsory citizenship behaviour (Vigoda-Gadot, 2006). Moreover, William and Anderson (1991) also introduced the concept of directional OCB which is directed towards an individual (OCBI) and OCB is directed towards the organisation (OCBO). Although many OCB concepts have been introduced by previous researchers, they are all referring to the original concept by Organ (1988).

Research on OCB has received much attention from previous researchers on the role of individual characteristics, task characteristics, organisational characteristics and leadership behaviour (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). As part of this focus, there is an emerging determinant of OCB regarding the effect of work-family conflict on organisation (Beham, 2011; Bolino & Turnley, 2005; Bragger, Rodriguez-Srednicki, Kutcher, Indovino, & Rosner, 2005; Fathuma, 2013; Jones, 2009; Klein, 2007; Tziner & Sharoni, 2014; Yu, Wang, & Huang, 2018). Work-family conflict (Work-FC) has been defined as “inter-role conflict which role pressures from work and family domain are not compatible between each other” (Greenhaus & Beutell, 1985; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). In particular, incompatibility is indicated by the fact that participation in a work role is more difficult than a family role and vice versa. For this reason, work-FC should have an effect on OCB through its stressors that will influence individual behaviour to be involved in OCB activities.

Moreover, self-efficacy is another important concept to be examined in this study. Self-efficacy has been defined as “people’s judgement of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p. 391). According to Marzuki, Subramaniam, Cooper, and Dellaportas (2017), self-efficacy reflects a critical trait that influences individual patterns, learning and emotions that enable and shape their behaviours and actions. The rationale to include self-efficacy to be related to citizenship behaviour is that individuals with high self-efficacy will have the confidence to perform and execute additional tasks, and produce successful outcomes.

This study suggests that self-efficacy mediates the relationship between work-FC and OCB. This is because self-efficacy is a personal resource (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007) that allows the individual to manage the loss of resources resulting from conflict in work and family. Hence, an individual with high self-efficacy will engage in citizenship behaviour. The importance of examining self-efficacy as a mediator arises from the fact that previous research calls to investigate further the role of self-efficacy as a mediator as individual differences (Judge, Jackson, Shaw, Scott, & Rich, 2007). This study attempts to overcome the shortcoming in the literature by considering self-efficacy as a variable mediator between work-FC and OCB.

The objective of this present study is to investigate the relationship between work-FC and OCB, and examine the role of self-efficacy as a mediating variable among employees in the public sector. This study contributes to the existing literature in two ways. First, this study offers empirical evidence of the relationship between work-FC and OCB based on the

Malaysian public sector context and examine the mediating effect of self-efficacy as a mediator. Second, this study analyses the effects of work-FC on self-efficacy and self-efficacy on OCB among public administrators from government organisations. Third, the mediation model was constructed by including the mediating role of self-efficacy in the research framework. With the employment of mediation analysis by Preacher and Hayes (2008) on the direct and indirect effect, the research explored the impact of the interaction between work-FC, self-efficacy and OCB. This study is believed to provide evidence and new insights on the potential impact of work-FC and citizenship behaviour among public administrators in the organisation.

## **2.0 THEORETICAL BACKGROUND AND HYPOTHESES**

According to Conservation of Resources (COR) theory (Hobfoll, 1989), an individual is motivated to “acquire, protect, and maintain resources”. Hence, Hobfoll (2001) categorised resources into four types, namely objects, conditions, personal characteristics and energy which is valuable for an individual. COR posits that there are two basic principles to understand it. First, is resource loss, which is harmful to the individual than resource gain. It has a bigger effect on the individual, hence they will avoid any behaviour that leads to resource loss since this affects their well-being (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014).

Second is resource gain. According to Hobfoll (2001), the purpose of an individual investing resources is to protect themselves from resource loss, to recover from losses, and to gain more resources. COR theory suggests that individuals invest resources in order to gain more resources to prevent their resources from depleting. In this study, individuals who perceive conflict between work and family will face resource loss and this prevents them from engaging in extra-role activities. However, self-efficacy as a personal resource will intervene and act as an additional resource that will assist them in managing their conflict and participate in OCB. This study has developed hypotheses for the mediating role of self-efficacy in the relationship between work-FC and OCB.

### **2.1 Work-FC and Self-efficacy**

Several studies have shown that work-FC has an effect on self-efficacy. Self-efficacy is illustrated as an individual’s belief in one’s ability to perform the task (Cinamon, 2010). According to Bandura (1977), self-efficacy is a central belief of an individual on perceptions of abilities in dealing with various situations and executing coping strategies. Hence, self-

efficacious beliefs assist to help face barriers and conflicts through initiating specific behaviours, persistence and emotional reactions (Bandura, 1986).

Past research work by Grandey and Cropanzano (1999) suggests that work-family conflict is negatively related to self-efficacy. Moreover, empirical findings by previous researchers such as Zand and Pierce (2011), and Smoktunowicz, Cieslak, and Demerouti (2017) indicate that employees with high work-family conflict can affect the individual's coping strategies such as self-efficacy.

In previous literature, the work-family conflict has a negative relationship with self-efficacy because the conflict between work and family are more threatening when the individual has a low self-efficacy (Cinamon, 2010; Grandey & Cropanzano, 1999). An individual will feel a lack of confidence to perform their ability to deal with the conflict. In contrast, an individual with high self-efficacy will perceive conflict as less threatening, allowing them to have high self-confidence to perform their coping strategies when dealing with conflict in work and family. Thus, the following hypothesis is there is a negative significant relationship between work-FC and self-efficacy.

## **2.2 Work-FC and OCB**

The relationship between work-FC and OCB has been examined by researchers, and it is established in the literature. For instance, Bragger et al. (2005) found a negative relationship between work-FC among 203 teachers in the United States. In a similar year, Bolino and Turnley (2005) found a positive relationship between individual initiative as one of the dimension under OCB with work-FC. However, Klein (2007) found no relationship between OCBI and OCBO towards work-FC; while in more recent years, Jones (2009) proved that there is no relationship between OCB and strain-based conflict and time-based conflict of work-family conflict. In a literature review article by Amstad, Meier, Fasel, Elfering, and Semmer (2011), OCB was found to have a stronger relationship with work-FC.

Moreover, an empirical study conducted by Beham (2011) on 286 employees in Spain proved that there is a negative relationship between work-FC and OCB. On the other hand, Fathuma (2013) found a positive relationship between OCB and work-FC. Similarly, Tziner and Sharoni (2014) found OCB has a significant relationship with work-FC among 120 Arabian employees. In a mediation study conducted among 435 employees and students in the United States by Cloninger, Selvarajan, Singh, and Huang (2015), the authors found that work-FC has partially mediated the relationship between family-WC and OCB. In a more recent study

conducted, researcher Yu et al. (2018) found that WIF (another term used for WFC) found a negative relationship with OCB.

Based on the COR theory between the relationship of work-FC and OCB, individuals are required to expand more resources in order to cope with increased workloads and fulfil family responsibilities. However, the resources available are limited. This will result in a dearth of resources which makes it difficult for an employee to engage in citizenship behaviour (Cloninger et al., 2015; Greenhaus, Collins, & Shaw, 2003). According to Hobfoll (2001), employees who experience conflict between work and family may decrease the performance in OCB in order to conserve personal resources and to avoid loss spirals. The relationship between work-FC and OCB has been well established in previous literature with regards to various contexts and findings. Hence, the following hypothesis is there is a negative significant relationship between work-family conflict and organisational citizenship behaviour (OCB).

### **2.3 Self-efficacy and OCB**

Previously, there are researchers who have attempted to explain the relationship between self-efficacy and OCB. Hence, there is a growing body of studies suggesting a relationship between individual-factors such as self-esteem and self-efficacy with OCB (Beauregard, 2012; Chen & Kao, 2011; Cohen & Mohamed, 2015; Kao, 2017; Khaola, 2014; Khodabandeh & Ardabili, 2015).

Research on individual factors such as self-efficacy has provided significant perspectives at individual and organisational levels. For instance, a study conducted by Cohen and Mohamed (2015) investigate the relationship of self-efficacy on OCB among Arab teachers in elementary school. Their research findings showed a significant positive relationship between self-efficacy and OCB. The study also suggests that self-efficacy influences an individual's appraisal towards a given situation which affects their decisions and behaviour at work (D'Amato & Zijlstra, 2008). Therefore, there is a positive significant relationship between self-efficacy and organisational citizenship behaviour (OCB).

### **2.4 Self-efficacy as Mediator**

Self-efficacy has often been examined as a mediating variable in the relationship between citizenship behaviour studies. For example, previous studies have indicated the mediating role of self-efficacy in various relationships between antecedents and OCB as outcomes, such as sense of calling and job performance and OCB (Park, Sohn, & Ha, 2016), knowledge

characteristics and OCB (Chen & Kao, 2011), and ethical leadership and OCB (Yang, Ding, & Lo, 2016). In contrast, there was limited research that examined if self-efficacy operates as a mediator through which work-FC is related to citizenship behaviour. This study proposes that self-efficacy will serve as a mediator between the antecedents of work-FC and the outcome: OCB (as shown in Figure 1). Accordingly, this study suggests that work-FC will decrease the limited available resources for an individual with high efficacious as additional resources trying to engage in citizenship behaviour within the organisation. Hence, the hypothesis is self-efficacy will mediate the relationship between work-FC and OCB.

### **3.0 METHODOLOGY**

This cross-sectional study is focused on public service employees in government organisations in Putrajaya, Malaysia. This study was conducted among 510 Malaysian employees who are working as public administrators at professional and management levels. In particular, following the public service department scheme, the respondents consisted of professional and management grades M41 until M54. Data collection was carried out using a population sampling in four government organisations. Data collection began with obtaining written consent from the human resource department of each of the organisations. The participants were informed about their voluntary participation to answer the questionnaires, and were assured on confidentiality and anonymity. A total of 1140 questionnaires were distributed to all employees. Finally, only 510 questionnaires were accepted for analysis, yielding a response rate of 55.3%.

#### **3.1 Measures**

*Work-FC and Family-WC* were measured using the 18-items self-report scales developed by Carlson, Kacmar, and Williams (2000). A six-point Likert-type response scale, ranging from “strongly disagree” (1) to “strongly agree” (6) was used. Each variable consisted of nine items respectively. A few examples of an item are “My work keeps me from my family activities more than I would like”, and “Behaviour that is effective and necessary for me at work would be counterproductive at home”. The reliability score for this scale was 0.87 and 0.88.

#### ***Self-efficacy***

Self-efficacy was assessed using six items developed by Rigotti, Schyns, and Mohr (2008). Examples of the items included “I can remain calm when facing difficulties in my job because

I can rely on my abilities”, “Whatever comes my way in my job, I can usually handle it”, and “I meet the goals that I set for myself in my job”. A six-point response scale from (1) strongly disagree to (6) strongly agree was used. Hence, Rigotti et al. (2008) reported that this scale is developed and reformulated for the work context. The reliability score for this scale is 0.87.

### ***Organisational Citizenship Behaviour (OCB)***

OCB was measured using the 16-item scale developed by Lee and Allen (2002). It is reported that this scale has a high internal consistency reliability ( $\alpha = 0.92$ ). Hence, this scale also has been adapted to the Malaysian environment by previous literature (Jehad, Habib, & Mohmad, 2011; Jihad, Farzana, & Rosmini, 2016; Kasa & Zaiton, 2015). A six-point Likert-type scale ranging from (1) *strongly disagree* to (6) *strongly agree* was used. An example of the items are “I keep up with developments in the organization” and “I take action to protect the organization from potential problems”.

## **4.0 RESULTS AND DISCUSSION**

This study utilized the partial least squares structural equation modelling (PLS-SEM) to test the hypotheses. The advantages of using PLS-SEM are it is more robust, provides reliable statistical power, and is useful in testing significance procedures (Hair, Hult, Ringle, & Sarstedt, 2014). Hence, the data were analysed using SmartPLS software version 3.2.7 (Ringle, Wende, & Becker, 2015).

In examining the model, a two-stage procedure was applied to test the study hypotheses as recommended by Anderson and Gerbing (1988). First, we tested the reliability and validity of the measures using a confirmatory factor analysis in SmartPLS 3.2. Then, structural equation modelling (SEM) was employed to measure the model fit hypotheses developed to the data.

Hence, to analyse the mediation, this study employed the mediation analysis approach suggested by MacKinnon, Cox, and Baraldi (2012), which has been proven to have more robust statistical power than the traditional Baron and Kenny (1986) approach. A bootstrapping method with 5000 samples was used following the recommendation of Preacher and Hayes (2008).

### **4.1 Descriptive Analysis**

Based on the demographic profile of the respondents, 65.3% of the public administrators are female and 34.7% are male. The majority of the respondents are 30 to 39 years old with 65.1%,



followed by 40 to 49 years old with 21.8%, 20 to 29 years old with 11.4%, and 50 years old and above with only 1.8%. Most of them are Malays (89.6%), followed by Chinese (5.1%), Indians (4.1%), and other races (1.2%). In terms of marital status, most of them are married (74.1%), followed by single (22.9%), while divorced, separated and widowed are only 2.0%, 0.6% and 0.4% respectively. In terms of academic qualifications, the majority of the respondents graduated with a bachelor degree (63.3%), 34.7% have a master degree while others have PhDs (0.8%), Diploma/certificate/STPM (1.0%), and secondary school (SPM) qualification (0.2%). In general, most of them have a tenure of 6 to 9 years (33.5%), more than 10 years (33.5%), followed by 3 to 5 year tenure (19.8%), and 1 to 2 years tenure (13.1%). Moreover, most of the respondents are from grade M44 (33.1%), followed by grade M48 (26.9%), and grade M41 (21.4%). The rest are from grade M52 (13.1%) and grade M54 (5.5%).

Table 1: Demographic profile of the respondents (n=510)

Demographic	Category	Frequency	Percentage
Gender	Male	177	34.7
	Female	333	65.3
Age	20 – 29	58	11.4
	30 – 39	332	65.1
	40 – 49	111	21.8
	50 years and above	9	1.8
Race	Malay	457	89.6
	Chinese	26	5.1
	Indian	21	4.1
	Others	6	1.2
Marital Status	Single	117	22.9
	Married	378	74.1
	Separated	3	0.6
	Divorced	10	2
	Widowed	2	0.4
Education	Secondary School (SPM)	1	0.2
	Diploma/Certificate/STPM	5	1.0
	Bachelor Degree	323	63.3
	Master Degree	177	34.7
	PhD	4	0.8
Tenure	1 - 2 years	67	13.1
	3 - 5 years	101	19.8
	6 - 9 years	171	33.5
	10 years and above	171	33.5
Grade	M41	109	21.4
	M44	169	33.1
	M48	137	26.9
	M52	67	13.1
	M54	28	5.5

## 4.2 Correlation Analysis

The result of mean, standard deviation and correlation analysis can be seen in Table 2. Self-efficacy has shown a highest value of mean with  $\mu = 4.8376$  with a standard deviation value of  $SD = 0.55078$  while OCB have a mean value of  $\mu = 4.7288$  with standard value  $SD = 0.48092$ . Work-FC has a lowest mean value with  $\mu = 3.1727$  with standard deviation value of  $1.05285$ .

The result of mean, standard deviation and correlation analysis can be seen in Table 2. Based on the result of Pearson's correlation analysis, it is found that there is no correlation between work-FC and OCB ( $r = -0.048$ ;  $p > 0.05$ ). However, work-FC is negatively associated with self-efficacy ( $r = -0.157^{**}$ ;  $p < 0.01$ ). Hence, self-efficacy is found to have a positive correlation with OCB ( $r = 0.473^{**}$ ;  $p < 0.01$ ).

Table 2: Pearson's Correlation Analysis

Variables	Mean	SD	OCB	Work-FC	Self-efficacy
OCB	4.7288	0.48092	1		
Work-FC	3.1727	1.05285	-0.048	1	
Self-efficacy	4.8376	0.55078	<b>0.473**</b>	<b>-0.157**</b>	1

Notes: \*\*  $p < 0.01$  level, \*  $p < 0.05$  level, OCB: organizational citizenship behaviour, work-FC: work-family conflict

## 4.3 Common Method Bias (CMB)

CMB is important for the data collected in a survey-based research (Hair et al., 2014). This study employs procedural and statistical approaches to ensure that CMB is not an issue in this study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For procedural approach, the anonymity and confidentiality for the responses were ensured to respondents. Hence, a clear instruction was provided for respondents to facilitate the survey completion. Furthermore, pilot test was also conducted prior to the actual data collection.

In terms of statistical approach, Harman's one-factor test is conducted to analyse the common method variance in the study (Podsakoff et al., 2003). All 40-items from all variables were tested by exploratory factor analysis in SPSS version 25. The result found that total variance for a single factor was 27.93 which is less than 50% (Podsakoff et al., 2003) as shown in Table 3. Therefore, this indicates that common method variance does not affect the data in this study.

Table 3: Summary of Factor Analysis for Common Method Bias Test

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.758	29.396	29.396	11.173	27.933	27.933
2	7.488	18.72	48.116			
3	2.365	5.912	54.028			
4	2.297	5.742	59.771			
5	1.599	3.997	63.767			
6	1.166	2.915	66.682			
7	1.043	2.607	69.289			
8	0.87	2.175	71.465			
9	0.784	1.96	73.424			
10	0.741	1.853	75.277			
11	0.664	1.661	76.938			
12	0.659	1.646	78.584			
13	0.601	1.502	80.086			
14	0.583	1.458	81.545			
15	0.543	1.357	82.902			
16	0.526	1.315	84.217			
17	0.48	1.199	85.416			
18	0.448	1.121	86.537			
19	0.445	1.113	87.65			
20	0.426	1.065	88.716			
21	0.388	0.97	89.685			
22	0.372	0.931	90.616			
23	0.344	0.861	91.477			
24	0.339	0.847	92.324			
25	0.316	0.789	93.113			
26	0.279	0.699	93.812			
27	0.266	0.665	94.476			
28	0.258	0.646	95.122			
29	0.231	0.577	95.699			
30	0.212	0.53	96.229			
31	0.206	0.515	96.744			
32	0.193	0.484	97.227			
33	0.186	0.466	97.693			
34	0.166	0.415	98.108			
35	0.154	0.386	98.494			
36	0.145	0.363	98.858			
37	0.137	0.342	99.2			

38	0.119	0.297	99.496
39	0.109	0.273	99.769
40	0.092	0.231	100

### 4.3 Measurement Model

To assess the measurement model, reliability and validity analysis for each of the variables were checked by examining the composite reliability value and the average variance extracted (AVE) value. The reliability test for the scale can be measured based on the factor loadings value, composite reliability and Cronbach's alpha (Henseler, Ringle, & Sinkovics, 2009). Table 4 shows the result of reliability analysis for the items of each construct. It is shown that the composite reliability and Cronbach alpha's value are greater than 0.8, indicating that the instrument used maintained a high internal consistency (Henseler et al., 2009; Sekaran & Bougie, 2016).

Table 4: Composite Reliability and Average variance Extracted (AVE)

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
OCB	0.883	0.907	0.520
Self-efficacy	0.898	0.922	0.662
Work-FC	0.959	0.960	0.570

Moreover, convergent validity was assessed based on the item's factor loading and average variance extracted (AVE). Any item loading less than 0.40 will be excluded (Hair et al., 2014). Based on Table 5, items OCB1, OCB2, OCB3, OCB6, OCB7, OCB8, and OCB9 were deleted due to low factor loadings. Additionally, all constructs had the value of AVE of 0.5 or higher, indicating that there is an acceptable convergent validity.

Table 5: Internal consistency reliability and convergent validity

Construct	items	Factor loading	Cronbach's alpha	CR	AVE
<b>Organizational Citizenship Behaviour</b>	OCB1	Deleted	0.883	0.907	0.52
	OCB10	0.689			
	OCB11	0.722			
	OCB12	0.765			
	OCB13	0.771			
	OCB14	0.803			
	OCB15	0.799			
	OCB16	0.756			
	OCB2	Deleted			
	OCB3	Deleted			
	OCB4	0.556			
	OCB5	0.601			
	OCB6	Deleted			
	OCB7	Deleted			
	OCB8	Deleted			
	OCB9	Deleted			
<b>Work-FC</b>	WFC1	0.607	0.959	0.96	0.57
	WFC2	0.619			
	WFC3	0.646			
	WFC4	0.705			
	WFC5	0.738			
	WFC6	0.742			
	WFC7	0.763			
	WFC8	0.762			
	WFC9	0.742			
	FWC1	0.798			
	FWC2	0.813			
	FWC3	0.823			
	FWC4	0.834			
	FWC5	0.793			
	FWC6	0.819			
	FWC7	0.804			
	FWC8	0.785			
	FWC9	0.816			
<b>Self-efficacy</b>	Efficacy1	0.79	0.898	0.922	0.662
	Efficacy2	0.795			
	Efficacy3	0.828			
	Efficacy4	0.823			
	Efficacy5	0.818			
	Efficacy6	0.829			

**Notes:** CR, composite reliability; AVE, variance extracted, OCB1, OCB2, OCB3, OCB6, OCB7, OCB8, OCB9 was deleted due to low loading.

#### 4.4 Discriminant Validity

Table 6: Discriminant validity

Construct	OCB	Self-efficacy	WFC
OCB	<b>0.723</b>		
Self-efficacy	0.522	<b>0.814</b>	
Work-FC	-0.18	-0.258	<b>0.759</b>

Next, the discriminant validity was examined. This study adopted Fornell and Larcker's (1981) criterion that indicates the discriminant validity is established when the AVE value is greater than the square correlation coefficient with other variables diagonally (Hair, Hult, Ringle, & Sarstedt, 2017). As shown in Table 6, the AVE value for work-FC (0.759), self-efficacy (0.814) and OCB (0.723) are higher than other constructs correlation. Therefore, the discriminant validity has been established.

Table 7: Heterotrait-monotrait ratio (HTMT)

Variables	OCB	Self-efficacy
Self-efficacy	0.584	
Work-FC	0.168	0.25

In addition, the Heterotrait-monotrait ratio (HTMT) was also used to evaluate the discriminant validity as suggested by Henseler, Ringle, and Sarstedt (2015). Table 7 shows that the highest ratio of HTMT value is 0.584 which is less than 0.85 as recommended by Henseler et al., (2015). Therefore, the discriminant validity of the model is adequate. Hence, it can be concluded that both the convergent and discriminant validity of the measurement model have been established for the variables scale used in this study.

#### 4.5 Multicollinearity

Table 8: Multicollinearity

Variables	OCB	Self-efficacy
Self-efficacy	1.071	
WFC	1.701	1

Prior to the structural model evaluation, the presence of multicollinearity must be assessed. The variance inflation factor (VIF) can be used to identify the multicollinearity problem in the study. According to Hair et al. (2014), a VIF value greater than 5.0 indicates a potential collinearity problem (Hair, Ringle, & Sarstedt, 2011). Based on Table 8, the VIF value for each construct is below the threshold value, indicating that there is no collinearity problem among the constructs.

#### 4.6 Structural Model

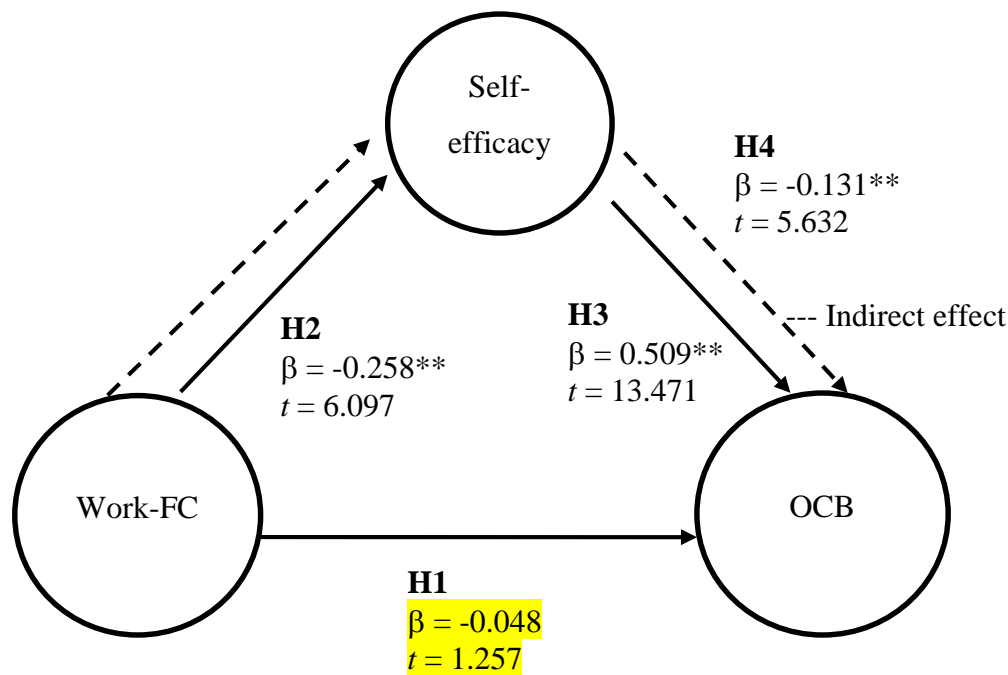
Table 9: Structural model assessment

Path	$\beta$	t-value	p-value	Results
H1 Work-FC $\rightarrow$ OCB	-0.048	1.257	0.209	Not supported
H2 Work-FC $\rightarrow$ Self-efficacy	-0.258	6.097**	<0.01	Supported
H3 Self-efficacy $\rightarrow$ OCB	0.509	13.471**	<0.01	Supported
H4 Work-FC $\rightarrow$ Self-efficacy $\rightarrow$ OCB	-0.131	5.632**	<0.01	Supported

**Note:** OCB, organizational citizenship behaviour; \*\*p<0.01

Once we analysed the measurement model, this study then examined the structural model to test all the hypotheses. Table 9 shows the results of the structural model based on the SmartPLS output. A bootstrapping approach was employed with 5000 resamples to examine the hypothesised model as recommended by Henseler et al. (2009). Based on the analysis, there is no significant relationship between work-FC and OCB ( $\beta = -0.048$ ,  $p > 0.05$ ). Thus, hypothesis 1 was not supported. In contrast, work-FC was found to have a negative significant relationship with self-efficacy ( $\beta = -0.258$ ,  $p < 0.01$ ). Hence, hypothesis 2 was supported. Self-efficacy was found to have a positive significant relationship with OCB ( $\beta = 0.509$ ,  $p < 0.01$ ). Thus, hypothesis 3 was supported.





#### 4.7 Mediation Analysis

In terms of the mediating effect of self-efficacy on work-FC and OCB relationship, Table 9 shows that work-FC directly affects self-efficacy negatively, and thus, self-efficacy has a positive direct effect on OCB. The results of the mediating effect test obtained a negative and significant value ( $a \times b = -0.131$ ), and  $p$ -value  $< 0.01$ . However, the direct effect between work-FC and OCB ( $-0.048$ ) is not significant ( $p = 0.209$ ). Therefore, it indicates that self-efficacy is an indirectly-only mediation (Zhao, Jr., & Chen, 2010). The coefficient of a negative-marked mediating effect indicates that the higher the conflict of work and family, the more resources is lost. However, if it is intervened by a high self-efficacious characteristic, the individual will gain additional resources which allows them to engage in citizenship behaviour.

Table 10: Results of  $R^2$  and  $Q^2$

Latent construct	$R^2$	Predict relevance
		$Q^2$
Self-efficacy	0.067	0.04
OCB	0.274	0.132

The model was evaluated by examining the explained variance of endogenous variables through coefficient of determination ( $R^2$ ), the effect sizes ( $f^2$ ), predictive relevance of  $Q^2$  and the path coefficient significant ( $\beta$ ). Accordingly,  $R^2$  refers to the explanatory power of an

exogenous variable explaining the endogenous variable. The  $R^2$  value can be measured by using the 0.75, 0.50 or 0.25 for endogenous latent variables as proposed by Hair et al. (2014). As shown in Table 10, the  $R^2$  values show that work-FC explains 27% of OCB ( $R^2 = 0.274$ ) while self-efficacy only explains 6% of OCB ( $R^2 = 0.067$ ).

The predictive relevance for the model was also assessed using the Stone-Geisser test. According to Hair, Ringle, and Sarstedt (2013), predictive relevance is established when the  $Q^2$  value of construct is above zero ( $Q^2 > 0$ ). As shown in Table 10, self-efficacy ( $Q^2 = 0.04$ ) and OCB ( $Q^2 = 0.132$ ) have acceptable predictive relevance values respectively. Consequently, it can be assumed that the endogenous variables can be predicted by the exogenous variables.

Table 11: Results of effect size ( $f^2$ )

Variables	$f^2$	Effect size
Work-FC $\rightarrow$ OCB	0.003	No effect
Self-efficacy $\rightarrow$ OCB	0.334	Moderate to strong
Work-FC $\rightarrow$ Self-efficacy	0.071	Weak

(Source: Authors own result)

Effect size ( $f^2$ ) presents the importance of the exogenous variable which contributes to the dependent variable of  $R^2$ . Based on the rule of thumb suggested by Hair et al. (2013), the magnitude of effect size ( $f^2$ ) can be identified by weak, moderate and strong effect categories, with the threshold values of 0.02, 0.15 and 0.35 respectively. Hence, the effect size value of less than 0.02 indicates that there is no effect ( $f^2 < 0.02$ ) (Hair et al., 2017). Based on Table 11, there is no effect on the relationship between work-FC and OCB ( $f^2 = 0.003$ ), while work-FC and self-efficacy show a weak effect ( $f^2 = 0.071$ ). Hence, the effect size ( $f^2$ ) for the relationship between self-efficacy and OCB shows a moderate to strong effect ( $f^2 = 0.334$ ).

#### 4.8 Discussion

The objectives of this study are twofold. First, to examine the effect work-FC and employee's citizenship behaviour in the context of government organisations in Malaysia. Second, to examine the mediating effect of self-efficacy between those relationships. This study extends the previous research on the relationship of work-FC with OCB and also the mediating effect of self-efficacy on those relationships. The result of this study confirms the earlier findings (Klein, 2007) that work-FC has no significant relationship with OCB. However, work-FC has

a negative significant relationship with self-efficacy. This result confirms the findings by Hsu, (2011). Similarly, the results of this study found that self-efficacy is a significant determinant of OCB, thus, in line with the findings of previous studies (Beauregard, 2012; Bogler & Somech, 2004; Chen & Kao, 2011; Cohen & Mohamed, 2015; Kao, 2017; Khodabandeh & Ardabili, 2015).

Moreover, the present study extends the previous research by extending the existing relationship of work-family conflict among employees and citizenship behaviour by examining the mediating role of self-efficacy between this relationship. Our results indicate that self-efficacy fully mediates the relationship between work-family conflict and OCB since the relationships are not significant, thus, supporting the hypothesised model. Therefore, it can be concluded that self-efficacy fully mediates the relationship between work-FC and OCB.

Additionally, the findings of this study provide empirical support for self-efficacy proposals (Cohen & Mohamed, 2015) regarding the role of personal resources (Guglielmi, Simbula, Schaufeli, & Depolo, 2012) within an individual on the conflict in work and family towards citizenship behaviour. The importance of citizenship behaviour is crucial as previous research has indicated that OCB can contribute to the effectiveness for organisations (Shim & Rohrbaugh, 2014). Moreover, the findings for this study also provides empirical support for the integration of conservation of resource theory as suggested by Hobfoll (2001). The findings suggest that self-efficacy as personal resources does not play a significant role in the individual conflict affecting their behavioural changes. Hence, the mediating effect of self-efficacy as revealed by this research supports the theoretical argument and makes contributions to the theory. It is believed that this study makes an important contribution to the literature of OCB by matching its predictors with mediators of self-efficacy in the same model.

This study has important practical implications. The findings of the present study show that conflict between work and family among employees are an important cause of individual's lack of citizenship behaviour. Organisations should focus on managing their employee's work and family conflict. Specifically, prior research suggests that work-family conflict are predictors of employees engaged in citizenship behaviour (Amstad et al., 2011; Beham, 2011; Cloninger et al., 2015; Fathuma, 2013; Tziner & Sharoni, 2014; Yu et al., 2018). Managing employees work and family domain might be an indicator of more active participation in extra-role behaviour and increase the organisation productivity. This is important since citizenship behavioural traits can improve performance and are likely to increase organisational effectiveness (Podsakoff, Whiting, Podsakoff, & Blume, 2009). Balancing work and family

responsibilities are critical, thus the organisation's approach should consider comprehensive factors (i.e. work environment, job responsibilities, and work-life balance) to manage conflict among employees.

On the other hand, this result indicates that maintaining and investing resources within the individual capacity is important not only to prevent resource loss, but to proactively engage in citizenship behaviour and contribute to effectiveness outcome for the organisation. Since the concept of work-family conflict is critical to the employee's citizenship behaviour, it is important to examine the antecedents of work-family conflict and its possible intervening or moderating factors. Organisations can focus on how to enhance employees' self-efficacy. Previously, few scholars argued to improve individual self-efficacy for a higher level of OCB. Researchers including Afsar and Badir (2016); Altinkurt, Anasiz, and Ekinci (2016); Gupta, Shaheen, and Reddy (2017) examined the psychological empowerment which consists of self-efficacy and found that setting a reasonable challenge, increase of responsibilities and autonomy, and providing support have an effect on higher citizenship engagement in the organisation.

#### **4.9 Limitations and Recommendations for Future Research**

This study has some limitations. First, the data of this study were collected only from Ministries in Putrajaya, Malaysia. The limited sample indicates that the results do not represent the total population of public administrators across the country. Moreover, the findings may not be applicable to other work settings such as private sector, academic institutions or public services since there are differences in the work environments, job responsibilities, and also individual characteristics.

Second, the work-FC construct was examined in a unidimensional perspective, but not as two distinguished constructs, namely work-family conflict (Work-FC) and family-work conflict (Family-WC), as suggested by Frone, Yardley, and Markel (1997) and Netemeyer, Boles, and McMurrian (1996). According to Haslam, Filus, Morawska, Sanders, and Fletcher (2014), work-FC and family-WC are related but distinct between each other. In fact, the two constructs need to be assessed separately because they may have a unique set of consequences and result in a different outcome (Sanaz, Khadijah, & Syaquirah, 2015). However, in this study, work-FC and family-WC constructs are incorporated into a single construct. For future studies, it is recommended to examine separately work-FC and family-WC constructs in relation to OCB while investigating self-efficacy as a mediator. Although a previous study has examined

work-family conflict and family-work conflict separately (Beham, 2011; Yu et al., 2018), the study did not include any mediator in the model. Therefore, future studies should integrate more potential mediator or moderator variables to enhance the OCB mechanism model.

Third, this study only focuses on public administrators in government organisations. We encourage future researchers to examine our developed model in a different setting to generalise across countries. A replication of the analysis with different context will improve its reliability and validity of the findings, and also increase the generalisability of the study.

## 5.0 CONCLUSION

In conclusion, although there is importance in personal resources on individual attitude and behaviour, research examining the potential mechanisms whereby individual characteristics influence their behaviour has been scanty. The present study makes an important contribution by examining how individual personal resources (self-efficacy) intervene with work and family conflict and encourage citizenship behaviour. We believe that this study provides a better understanding of how individual personal resources influence their attitudes and behaviour. We hope that the findings of this study will assist any future research to examine the potential determinants and the possibilities of personal resources on the outcome of OCB.

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