THE MEDIATION OF SELF-EFFICACY BETWEEN ANTECEDENTS AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR IN THE PUBLIC SECTOR

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ABSTRACT

Organisational citizenship behaviour (OCB) has become popular among scholars in organisational behaviour, psychology, and management studies since it significantly contributes to the success of an organisation. Organisational citizenship behaviour plays an important role in organisational settings for its effectiveness and the efficiency of the services or operation provided. Empirical studies on OCB in recent years were mostly conducted in a Western context. However, there is a limit of providing extensive information and in-depth understanding of employee's citizenship behaviour in Malaysia settings. This study attempts to narrow the gap in the past literature. In the public sector, OCB is highly valued and critical in enhancing the performance of a government organisation. Organisational citizenship behaviour plays a significant role by encouraging employees to respond effectively to the changing environment and at the same time be able to deliver high-quality services. However, there is little empirical research on OCB in the public sector and the applicability of the resource perspective from the theory of conservation of resource in measuring employee's citizenship behaviour. This study utilises the conservation of resource theory in an effort to provide evidence on the effect of individual and organisational factors towards employees' citizenship behaviours thus extending the application of conservation of resource (COR) theory on the effect of personal resource as a mediator. Specifically, this study looks at individual factors such as distinguished work-family conflict (work-FC) and family-work conflict (family-WC) and an organisational factor such as supervisory support as independent variables that may have an effect on citizenship behaviour. Furthermore, this study attempts to investigate the role of self-efficacy as a mediating variable on those relationships. Using a survey data of 618 public administrators from four government organisations located in Putrajaya, Malaysia, the conservation of resource theory was tested using statistical analysis SPSS and Structural Equation Modelling - Partial Least Square (Version 3.0). It

was found that self-efficacy mediates the relationship between supervisory support and OCB as well as between family-WC and OCB. In contrast, self-efficacy does not mediate the relationship between work-FC and OCB. The findings illustrate the effect of self-efficacy as a personal resource that contributes to the resource's loss and resource gain, which influence employees' citizenship behaviour. In addition, self-efficacy and supervisory support were found to be a notable predictor of citizenship behaviour, a finding that corresponds to the past studies which denote that individual self-belief and supportive supervisory within an organisation is a predictor of individual citizenship behaviour. The results suggest that an organisation should focus on developing individual characteristics to foster self-belief and to promote a supportive working environment, the purpose being to enhance employees' engagement in the organisation. The findings of this study can supplement the existing literature and open new avenues for future research.

ABSTRAK

Gelagat Kewarganegaraan Organisasi (*Organisational Citizenship Behaviour*) telah menjadi popular dalam kalangan sarjana dalam bidang tingkah laku organisasi, psikologi, dan pengurusan kerana ia menyumbang secara signifikan kepada kejayaan sesebuah organisasi. Gelagat Kewarganegaraan Organisasi memainkan peranan penting dalam pengaturan organisasi untuk keberkesanan dan kecekapan perkhidmatan atau operasi yang disediakan. Kajian empirikal pada Gelagat Kewarganegaraan Organisasi pada tahun-tahun kebelakangan ini kebanyakannya dilakukan dalam konteks Barat. Walau bagaimanapun, terdapat had yang menyediakan maklumat yang luas dan pemahaman mendalam mengenai gelagat kewarganegaraan pekerja di Malaysia. Kajian ini cuba untuk merapatkan jurang dalam kesusasteraan masa lalu. Dalam sektor awam, Gelagat Kewarganegaraan Organisasi sangat dihargai dan kritikal dalam meningkatkan prestasi organisasi kerajaan. Gelagat Kewarganegaraan Organisasi memainkan peranan penting dengan menggalakkan pekerja untuk bertindak balas dengan berkesan terhadap persekitaran yang berubah-ubah dan pada masa yang sama dapat memberikan perkhidmatan yang berkualiti tinggi. Walau bagaimanapun, terdapat sedikit kajian empirikal mengenai Gelagat Kewarganegaraan Organisasi dalam sektor awam dan perspektif kebolehgunaan sumber daripada Teori Pemeliharaan Sumber *(Conservation of Resource Theory)* dalam mengukur gelagat kewarganegaraan pekerja. Kajian ini menggunakan Teori Pemeliharaan Sumber dalam usaha untuk memberikan keterangan mengenai kesan faktor individu dan organisasi terhadap gelagat kewarganegaraan pekerja sehingga memperluaskan penerapan Teori Pemeliharaan Sumber atas pengaruh sumber peribadi sebagai pengantara. Secara khusus, kajian ini melihat faktor-faktor individu seperti konflik kerja-keluarga dan konflik keluarga-kerja dan faktor organisasi seperti sokongan penyeliaan sebagai pembolehubah bebas yang mungkin mempunyai kesan

terhadap gelagat kewarganegaraan organisasi. Tambahan pula, kajian ini cuba untuk mengkaji peranan keyakinan kendiri (*self-efficacy*) sebagai pembolehubah pengantara terhadap hubungan tersebut. Menggunakan data tinjauan 618 pentadbir awam dari empat organisasi kerajaan yang terletak di Putrajaya Malaysia, Teori Pemeliharaan Sumber telah diuji menggunakan analisis statistik SPSS dan *Structural Equation Modelling - Partial Least Square (Versi 3.0)*. Kajian ini mendapati bahawa keyakinan kendiri adalah pengantara saling melengkapi dalam hubungan antara sokongan penyeliaan dan konflik keluarga-kerja dengan Gelagat Kewarganegaraan Organisasi. Sebaliknya, keyakinan kendiri tidak menjadi pengantara dalam hubungan antara konflik kerja-keluarga dengan Gelagat Kewarganegaraan Organisasi. Penemuan ini menggambarkan kesan keyakinan kendiri sebagai sumber peribadi yang menyumbang kepada kehilangan sumber dan perolehan sumber, yang menyumbang kepada gelagat kewarganegaraan pekerja. Di samping itu, keyakinan kendiri dan sokongan penyeliaan adalah menjadi peramal utama gelagat kewarganegaraan, penemuan ini mengesahkan kajian lepas yang menunjukkan bahawa keyakinan kendiri individu dan sokongan penyeliaan dalam organisasi adalah peramal gelagat kewarganegaraan individu. Hasilnya menunjukkan bahawa sesebuah organisasi perlu menumpukan pada pembangunan ciri-ciri individu untuk memupuk keyakinan kendiri dan mempromosikan persekitaran kerja yang menyokong untuk meningkatkan penglibatan pekerja dalam organisasi. Penemuan kajian ini dapat menyumbang kepada kesusasteraan dan membuka peluang baru untuk penyelidikan masa depan.

ACKNOLWEDGEMENTS

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LIST OF SYMBOLS AND ABBREVIATIONS

β   :   Beta values

ADO   :   Administrative and Diplomatic Officer

AVE   :   Average variance extracted

CB-SEM   :   Covariance-Based Structural Equation Modelling

CMB   :   Common Method Bias

COR   :   Conservation of Resource

f^2 :   Effect size

Family-WC :   Family-work Conflict

HTMT   :   Heterotrait-Monotrait

OCB   :   Organisational Citizenship Behaviour

PLS   :   Partial Least Square

PLS-SEM   :   Partial Least Square – Structural Equation Modelling

PSD   :   Public Service Department

Q^2 :   The predictive relevance

R^2 :   The coefficient of determination

SE   :   Self-efficacy

SEM   :   Structural Equation Modelling

SS   :   Supervisory Support

VIF   :   Variance inflation factor

Work-FC   :   Work-family Conflict

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CHAPTER 1: INTRODUCTION

1.1   Background of the Study

Over the past three decades, theoretical and empirical investigations on organisational citizenship behaviour (OCB) have continued to evolve among scholars in terms of the nature, advancement, and consequences of the aspect (Klotz, Bolino, Song, & Stornelli, 2018). Hence, OCB has been the most popular result in organisational behaviour, psychological, and management as shown in previous studies (Ocampo et al., 2018). At the same time, the increasing complexity of changes in employees' demographics, technological advancement, and economic structures necessitate changes in organisational operations thus requiring collaboration between employees to ensure the organisation achieves its desired objectives.

Basically, the concept of OCB can be traced to the initial work by Kahn in 1964. Kahn, Wolfe, Quinn, Snoek, and Rosenthal, (1964) identified three types of behaviour required for employees to effectively function in an organisation, for example, by deciding to participate and remain within an organisation, by performing in the work that has been set, and by executing work or activity beyond what has been set by the organisation. Katz termed this concept as *extra-role behaviour* and consequently, the concept of "organisational citizenship behaviour" was introduced by Thomas Bateman and Dennis Organ in 1983.

Organisational Citizenship Behaviour is one of the important factors that contribute to the successfulness of an organisation. It plays a prominent role in an organisational setting particularly in a corporate environment (Shim & Rohrbaugh, 2014). Originally, OCB is defined as "the discretionary contributions that go beyond the strict description

and that do not lay claim to contractual recompense from the formal reward system"
(Organ, Podsakoff, & MacKenzie, 2006, p. 34). Taking discretionary action will help to
support an organisation's public image and avoid potential organisational problems by
offering ideas beyond required for the job (Curry, 2016).

The present study is primarily based on the conservation of resource (COR) theory
(Hobfoll, 1989) as a resource-based theory of stress and human motivation. The theory is
an integrated theoretical framework for understanding resource loss and resource gain
and how individuals respond to them. The core tenet of this theory is that individuals
would strive to retain, protect, and build resources (Hobfoll, 1989, p. 516) and that
individuals would value the following four types of resources to achieve their goals: (1)
objects such as work tools, (2) personal characteristics such as self-efficacy, (3)
conditions such as work-family conflict, and (3) supervisory support and energies such
as time.

The COR theory was selected for this study to argue that individuals would seek to
create a surplus of resources and avoid resource loss (Peixu He, Xiaoling Wang, Ze Li,
Mengying Wu, & Estay, 2018). The first principle is resource loss: individuals would
experience psychological discomfort or distress when their resources are lost or
threatened with loss, or when they failed to gain a resource after a resource investment
(Hobfoll, 1989). This "loss cycle," also known as "loss spiral," may cause individuals to
focus their efforts on protecting and conserving their resources to avoid resource loss or
depletion in the future. The apparent concept centres on the motivational element:
individuals may engage in the behaviours of avoiding resource loss since loss can have
such a negative impact on their behaviours (Halbesleben, Neveu, Paustian-Underdahl, &
Westman, 2014). The second principle of the COR theory is resource investment;

individuals would invest resources to protect against resource loss, to recover from loss, and to gain resources (Hobfoll, 2001). They would actively seek to gain additional resources by investing available resources and by acquiring excess resources to cope with future strain (Hobfoll, 2001).

Organisational citizenship behaviour research has been conducted extensively in the European and American contexts since it was introduced by Smith, Organ and Near in 1983. However, the findings on organisational behaviour studies conducted in the Western contexts are not generalisable in Southeast Asian countries (Lau, McLean, Lien, & Hsu, 2016). Such limited perspectives limits from providing extensive information about employees' behaviour. This study attempts to narrow this gap, thus enriching the understanding of OCB in a Malaysian context.

Furthermore, it is crucial for public sector managers to give attention and swiftly improve their current performance in order to achieve their organisational objectives. The transformation of public sector delivery is important to ensure the efficiency of the government system and the successful implementation of all the government policies. Hence, the role of government administrator has become challenging due to the development of the global economy, rapid technology innovation, increased societal demands, and the need to provide social services with limited resources (Rosli, Aziz, Mohd, & Said, 2015).

1.2 Public Sector in Malaysia

Malaysia is regarded as one of the fastest developing countries in the South-East Asia region. This is proven by the Global Competitive Report 2018 – 2019, which shows

Malaysia increased its position to the 25th spot among 140 countries, compared to its position in the previous years (Malaysia Competitive Corporation, 2018). Malaysia has achieved Global Competitive Index (GCI) of 4.0 score out of 74.4 and ranked second among nine ASEAN countries, thus implying a strong growth and development of the Malaysian economy and sustainability. According to Public Sector Transformation Division, this achievement is based on the implementation of Government Transformational Planning and Economic Transformation plan initiative by the Malaysian government (Public Sector Transformation Division, 2014). Additionally, Malaysia economies has recorded a rapid growth for nine consecutive years and has become the most consistent performer among other ASEAN countries, such as Brunei, Indonesia, the Philippines, Singapore, Thailand, and Vietnam.

The Malaysian government system has begun since the country's independence in 1963. The system consists of a constitutional monarchy system for every five-year term. The country's election is held every five years and is based on a democratic parliament system of appointing a prime minister to lead the government. The Malaysia government system consists of a three-tier government structure: the federal government, the state government, and the local government (Premalatha, 2014). In a federal government, there are 24 federal ministries to oversee the administration at the federal level.

The Malaysian public sector has aspired to become a fully developed nation by the year 2020 as the ultimate goal of National Vision 2020 (Tjiptoherijanto, 2012). Vision 2020 was introduced by the fourth prime minister of Malaysia, Tun Dr Mahathir Mohamad, during the launching of the Sixth Malaysia Plan in 1991. Tun Dr Mahathir Mohamad stated that Vision 2020 aims is to "create confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, moral and

tolerant, caring, economically just and equitable, progressive and prosperous and full possession of an economy that is competitive, dynamic, robust and resilient" (Berman, 2011, p. 216).

The goal of Vision 2020 is for Malaysia to become a fully industrialised nation in all aspects of life, including economic prosperity, social well-being, educational world-class, political stability, and psychological balance (Rosli et al., 2015). The launching of Vision 2020 objectives has not only steered the future of the country to be a developed nation but also given a new set of challenges for the public service. Therefore, there is a need to strengthen the governance and inculcate accountability in the public service in order to improve the effectiveness of government programmes as the initiative towards the achievement of Vision 2020 objectives (Public Sector Transformation Division, 2014).

The Malaysian public service has undergone a series of five-year development plans since Malaysia's independence in 1957 until the late of the 1980s. The introduction of New Economic Policy (NEP) in the late 1960s aims to eradicate poverty and restructure the economic distributions among Malaysians. Hence, the improvement and reforms in public service and government agencies are crucial in solving the socio-economic problem and in providing good services to the public. Later, in 1991, the Sixth Development Plan introduced the National Development Policy (NDP) on the basis of "balanced development". The focus of the balanced development strategy was on socio-economic developments, such as diversification of the industrial based, enhancement of human resource development, promotion of technological upgrading, and reduction of structural imbalances among sectors (Sharifah, 2011). Consequently, there has been a strategic urgency to promote higher value-added, knowledge-based, and information

technology orientation for the Malaysian public sector to cope with the rapid changes (Public Sector Transformation Division, 2014; Rusli Ahmad & Nur Azman Ali, 2004).

Then, in the early 1980s, the Malaysian government continued its effort by embarking on an administrative reform of public service delivery (Noore Alam, 2012). The New Public Management (NPM) initiative was introduced in 1981 – 2005 aiming at the transformation of the public sector into an efficient, dynamic, and market-driven administration (Noor Alam, 2006). Under the initiative, various management practices were implemented such as quality control circle and total quality management in the late 1980s, and the "performance-based culture" based on the key performance indicators (KPIs) approach in 1990s (Siti Nabiha, 2008).

As Malaysia continued to improve its public service delivery, the Malaysian government introduced additional reformation initiatives, one of which was the Government Transformation Program (GTP) in January 2010. This policy was implemented to accelerate Malaysia's growth, productivity, and human resource development (Mazni, Roziah, Maimunah, & Bahaman, 2013). The plan aimed to move towards an efficient and effective public sector particularly by improving the processes, systems, and procedures as well as by inculcating the accountability, quality values, and philosophies within the civil servants (Siti Nabiha, 2008). In line with the National Transformation Agenda, Public Service Department introduced the Public Service Transformation Framework, which focuses on five strategic-driven initiatives, such as talent development, organisational development, citizen-centric service delivery, inclusivity and ownership, and enculturation of shared values of patriotism, ethos, and integrity (Public Sector Transformation Division, 2014).

Recently, the Eleventh Malaysia Plan (2016 to 2020) introduced the implementation of the National Blue Ocean Strategy (NBOS). One of the objectives under the Eleventh Malaysia Plan is to transform public service for high productivity. It also provides a foundation for the public sector to play an important role in building a better Malaysia for all Malaysians. Hence, the NBOS initiative focuses on formulating and delivering high impact national strategies to efficiently executed with lower cost (Economic Planning Unit, 2015).

The Malaysian public sector has become the backbone of the country's administrative system responsible for carrying out the vision of the country. The importance of public sector reform is backed by the attention given by the nation's top leaders in various initiatives in improving the delivery system. For instance, a number of proposals were introduced by previous former prime ministers, Tun Abdullah Haji Ahmad Badawi and Dato' Seri Najib Tun Abdul Razak such as "Five principles to increase efficiency and effectiveness of the Public Service delivery" and "Five Elements Characteristics of a High Performance Culture Which should be adopted by the Public Service" (Tjiptoherijanto, 2012). The current prime minister, Tun Dr Mahathir Mohamad, has also stressed out the following seven fundamental features of Vision 2020: quality, productivity, innovativeness, discipline, integrity, accountability, and professionalism for public sector performance reforms (Berman, 2011; Mahathir Mohamad, 2008).

In Malaysia, there are 1.7 million employees in the public sector in 21 schemes of services under Public Service Department. The public sector has a role in facilitating and monitoring in meeting the expectations of the quality services. More importantly, the public sector also has become the change agent for the nation's development program through the strategic thrusts under the public service transformation framework, such as

stimulating public servants and revamping public organisations for enhancing service delivery (Public Sector Transformation Division, 2014). Therefore, it is vital to have an administrative system that is high performing, trustworthy, dynamic, and people-oriented in order to respond effectively to the complex and rapid changes of the economic and social settings.

In summary, the Malaysian public sector plays a significant role in the country's nation-building. The transformation of public service is crucial to support the national transformation agenda. It is important for the country to remain competitive and achieve the objectives to be a developed, inclusive, and sustainable nation by 2020. The emergence of the rapid pace of technology advancement, intense global competition, and increased customer's expectations has required the strategic networks and collaboration within an organisation in order to ensure that the service meets the needs of the public. Therefore, OCB has been recognised as one of the vital tools that can influence the effectiveness and efficiency of service delivery performance in the public sector.

1.3   Statement of Problem

Organisational citizenship behaviour is considered as one of the most important factors influencing productivity and improving organisation performance (Podsakoff, Whiting, Podsakoff, & Blume, 2009; Whitman, Van Rooy, & Viswesvaran, 2010). OCB has been linked with employee's engagement towards organisations through a proactive behaviour and extra-role initiative, although the factor has not been stated in any job description or enforced by any employment contract.

Organisational citizenship behaviour is highly valued and critical in enhancing government organisations (Norasherin, Rohaida, Mozhdeh, Siti, & Nor Aiza, 2016). A

study conducted by Rashidah, Aziz and Munir (2014) on 212 government employees in Malaysia found that the employees' OCB is a significant predictor of the organisational performance. According to Karolidis (2016), government operations that actively engage in OCB will be managed with efficiency, and the service will be delivered with higher quality. As such, it is crucial to examine OCB as an important aspect of employee's behaviour because it can contribute to organisational productivity and effectiveness (Nguyen, Chang, Rowley, & Japutra, 2016).

According to Johanim and Khulida (2018), the Malaysian public sector has failed to achieve high-quality service delivery despite various transformation programmes being implemented to improve its performance. Hence, the public sector in Malaysia has been subjected to criticism for inefficiency, red tape, lack of flexibility, ineffective accountability, and poor performance among the officials (Noor Alam, 2006). It was also found that the employees in government agencies in Malaysia commonly take longer breaks, spend long hours fantasising, and waste time (Awanis, 2006). These problems have appeared to be the norms in the operation of the public sector. Such an observation is aligned with the perception that employees in the public sector lack the desire to accomplish more beyond official requirements and that they have a belief that working with the government does not require commitment more than those considered necessary (Ayinde & Oladele, 2016).

The public sector organisations in Malaysia has encountered many challenges and increased pressure in an attempt to provide good services as a response to the sustainable nation's development. Among others, globalisation and technology advancement have become the major challenges that need to be faced by Malaysian government institutions (Lai, 2015). In view that employee citizenship behaviour is important towards promoting

organisations performance and productivity, questions arise as to the factors that might influence extra-role behaviours and the extent to which the public sector employees are willing to perform citizenship behaviour beyond their current role requirements.

Malaysia has been reported to have issues of employee's engagement in organisations. In a study by Gallup (2017), Malaysia was identified as having the highest proportion of disengaged employees compared to other countries in the world. Specifically, Malaysia was recorded with having only a small percentage (17%) of engaged employees while the remaining 83 per cent were categorised as disengaged (70%) and actively disengaged employees (13%). In another study conducted by International Data Corporation (IDC) Singapore in 2016, it was found that only 23% of Malaysian professionals were engaged and satisfied at work (International Data Corporation, 2016). This figure is much lower compared to the other Asia Pacific countries such as Australia (42%), the Philippines (59%), and India (59%).

Additionally, the Malaysian public sector has been criticised for their poor services, bureaucracy, inefficiency, wastefulness, unresponsiveness, allegations of bribery, and misuse of power (Rashidah, Mazuri, & Ahmad Munir, 2013). A survey by CUEPACS in 2010 found that a total of 6133 civil servant employees were problematic and delivered low performance (Cuepacs, 2010), and a total of 3000 civil servants had a problem in delivering quality services and were not committed to work (Cuepacs, 2015). The Civil Service Commission also reported 66 cases of disciplinary actions taken towards civil servants in 2016 (Bernama, 2017). In a recent World Bank report, the performance of Malaysia's civil service is reported to be declining between the year 1991 and 2014 (The Star Online, 2019).

The issue of Malaysia's public sector performance also can be seen from the report produced by Public Complaint Bureau on the statistics of complaint towards government ministries that there has been a higher total number of complaints received from the year 2013 to 2018 (Public Complaint Bureau, 2018). Most of the complaints identified were delay or no action, failure to adhere to a set of procedure, unsatisfactory quality of service, unfair action, misconduct of civil servant, abuse of power or misappropriation, and inadequacies of policy implementation and law (Table 1.1).

Table 1.1: Statistics on complaint towards government ministries

Categories	Years					
	2013	2014	2015	2016	2017	2018
Delay/ No action/failed to meet complainant requirement	2428	1596	1432	1013	445	639
Unsatisfactory Quality of service	1281	644	482	684	636	723
Unfair action	867	389	338	415	293	444
Misconduct of Civil servant	173	146	140	191	149	201
Abuse of power/misappropriation	125	110	111	196	141	237
Failure to adhere to set procedures	223	380	547	663	453	798
Inadequacies of Policy implementation and Law	31	75	84	101	74	111
Total	5128	3340	3134	3263	2191	3153

Source: Complaint statistics report 2013 – 2018 by Public Complaint Bureau (PCB)

In Malaysia, studies on OCB has been conducted in various settings. Most of the previous studies were conducted in private sectors (Abdullah, Yusuf, Rana, Mohammad, & Bharat, 2015; Naail, Mohamed, Sugumaran, & Nadhira, 2015; Lau, McLean, Lien, & Hsu, 2016; Naqshbandi et al., 2016), academic institutions (Norfaizzah Ramlee et al., 2016; Romle, Faezah, Talib, Sabrina, & Shahuri, 2016), and public services (Ali, Abu Daud, Aminah, & Bahaman, 2008b; Nik Nazli et al., 2018; Norasherin et al., 2016). However, research on OCB in government organisation has largely been ignored. As far

as the researcher is aware, only a few studies on OCB concern local government organisations (Mazni, Roziah, Maimunah & Bahaman, 2013; Rashidah, Mazuri, Noorul, Aziz, & Munir, 2016; Syukri, Arsiah, & Dousin, 2013). To date, little is known about the OCB among public administrators in the government organisations in Malaysia. This study attempts to fill this gap by investigating the potential causes that could have an effect on OCB.

The factors identified above are a combination of individual and organisational factors for OCB in an organisation. Therefore, this study attempts to contribute to the OCB literature by investigating whether and if so, how public administrators OCB are affected by the individual and organisational factors, and therefore, how self-efficacy plays its role as a mediating variable on those relationships. This study attempts to achieve the objectives developed and answer the questions by examining an emerging individual factor such as work-family conflict and an organisational factor such as supervisory support as well as the role of the personal characteristic of self-efficacy as a mediator in the running of a Malaysian government organisation in Putrajaya.

1.4   Research Questions

The problems stated above give rise to the following questions:

1. What are the effects of work-FC, family-WC, supervisor support, and self-efficacy on OCB?
2. What are the effects of work-FC, family-WC, supervisor support on self-efficacy?

3. Does self-efficacy mediates the relationship between work-FC, family-WC, and supervisor support in OCB?

1.5 Research Objectives

The main aim of this study is to investigate the relationship between the antecedents of work-FC, family-WC, and supervisory support on organisational citizenship behaviour with the role of self-efficacy as a mediator. The following objectives are therefore set to be achieved:

1. To examine the relationship between work-FC, Family-WC, supervisor support, self-efficacy, and organisational citizenship behaviour.
2. To examine the relationship between work-FC, family-WC, supervisor support, and self-efficacy.
3. To investigate the mediating effect of self-efficacy on the relationship between work-FC, family-WC, and supervisor support on organisational citizenship behaviour.

1.6 Scope of the Study

The scope of this study is the public sector in Malaysia. In specific, the developed framework in this study was tested in four organisations in Putrajaya, namely Public Service Department (*Jabatan Perkhidmatan Awam*), Ministry of Home Affairs, Ministry of Health, and also Ministry of Education. These four (4) organisations was chosen following their willingness and agreeable to participate in the study. The sample of this study is therefore limited to the employees of these four (4) organisations.

According to the Public Sector Transformation Division (2014), the public sector is responsible for implementing and navigating the government's vision and policy for the benefit of Malaysian citizens. Hence, the public sector also provides services in administrative functions at the federal levels. The government ministries in Putrajaya were chosen as the target population for the study because of their status as federal government administrative centres. The Public Service Department is also accountable for all the actions related to the implementation of all government employees' policies. Looking at the vital role of the government public sector, the aim to include government organisations within the scope of the study seems relevant.

1.7   Significance of the Study

This study is expected to provide a few theoretical and practical contributions. In terms of theoretical contribution, this study contributes to the current theory by exploring the fundamental perspective of the conservation of resource (COR) theory (Hobfoll, 2001). The finding of the study extends this theory, in a research model, by examining the effect of resource depletion factors such as work-FC and family-WC, as well as resource gain factors such as supervisory support and self-efficacy towards citizenship behaviour. Therefore, this study could provide a significant value to future researchers who can use the theory to investigate the role of resources on the effect of behavioural outcome within an organisation.

Findings from this study can also facilitate understanding on how the individual factors and organisational factor identified can influence OCB. Review of the literature on OCB concluded that work-FC, family-WC, and supervisory support are the emerging

factors that can affect OCB (Akram, Kamran, Iqbal, Habibah, & Atif, 2018; Cloninger, Selvarajan, Barjinder Singh, & Huang, 2015). Hence, previous studies found that self-efficacy has a significant contribution towards employees' behaviour (Ajzen, 2002; Bandura, 1997)

This study also gives benefit and contributes to the literature in self-efficacy by providing a new perspective of the factor as a mediating variable. An investigation on the mediating effect of self-efficacy can provide an interesting finding on the relation towards OCB. This study offers future researchers' new insights and understanding of which factors could significantly affect citizenship behaviour and how self-efficacy mediates those relationships. This study may also assist future researchers in understanding the impact of employee's individual characteristics, including self-efficacy, which can potentially influence individual behaviour of OCB. This study can also aid future researchers to examine other potential variables that may contribute to the improvement of OCB.

Additionally, it is found that very few studies have been conducted on OCB in the context of public sector in Asian countries, particularly Malaysia. Some of the studies focused only on the local government (Rashidah, Mazuri, Noorul, Aziz, & Munir, 2016; Syukri, Arsiah, & Dousin, 2013), academic institutions (Lim, Yee, Yan, & Lin, 2014; Romle et al., 2016; Sofiah, Mohd Zabid, & Lionel, 2016), public services (Jim et al., 2013; Nasurdin, Ahmad, & Tan, 2015; Shaiful & Hassan, 2006), and private sectors (Abdullah, Yusuf, Rana, Mohammad, & Bharat, 2015; Naqshbandi et al., 2016). It is noted that none of the previous studies has explored citizenship behaviour among employees who are working in federal government organisations in Malaysia. The

present study will facilitate more in-depth understanding of OCB in the context of government organisations.

In terms of practical contribution, this study provides important findings that may help organisations to understand employee's behaviour. Since the OCB may have an impact on the overall effectiveness of an organisation (Haun, Steinmetz, & Dormann, 2011; Tziner & Sharoni, 2014), identifying the factors that may affect citizenship behaviour is crucial to ensure that the organisations are aware of and able to prepare the necessary actions to improve their performance. Hence, the finding can serve a guideline to facilitate human resource practitioners' provision of appropriate support through employee's development programmes.

Additionally, findings from this study can contribute to positive changes in the service delivery in the public sector. The findings may motivate government organisations to consider possible policy changes such as work and family support programmes as well as the adaptation of leadership support programmes. Hence, the result can also assist other government organisations in improving policies that can improve employee's citizenship behaviour within the organisations.

1.8   Operational Definitions

1.8.1 Organisational Citizenship Behaviour (OCB)

In this study, OCB refers to discretionary behaviours on a work-related task which assist and support individual and organisational environment. This study refers to Lee and Allen's (2002) conceptualisation of OCB as employees behaviour that is not critical to the task or job, and that serves to facilitate organisational functioning. The dimensions

of OCB were identified by Organ (1988) as consisting of altruism, conscientiousness, civic virtue, sportsmanship, and courtesy.

1.8.2 Work-family Conflict (work-FC)

Work-family conflict refers to "a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). Work-FC refers to the demand of work role interferes with family responsibilities of one individual which result with a conflict. Particularly, the demand for work responsibilities might interfere with an individual's family role thus causing depletion of resources.

1.8.3 Family-work Conflict (Family-WC)

This study describes family-WC as a form of inter-role conflict of an individual caused by the family demand, which interferes with job responsibilities (Netemeyer, Boles, & McMurrian, 1996). In a definition based on Greenhaus and Beutell (1985), family-WC is a "form of inter-role conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities" (Tsionou & Konstantopoulos, 2015, p. 594).

1.8.4 Supervisory Support

In this study, supervisory support is defined as employees' perception concerning the degree to which their supervisors value their contribution and care about their well-being (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Kottke

& Sharafinski, 1988). Supervisory support is described as individuals perceived support, encouragement, and concern from their supervisor. In general, support from supervisor offers help with work-related tasks in terms of providing emotional, material, and informative supports (Bhanthumnavin, 2003).

1.8.5 Self-efficacy

This study follows Rigotti, Schyns, and Mohr's (2008) definition of self-efficacy which denotes the aspect as an individual's self-belief in his/her competence to perform in a variety of different situations. This definition is also aligned with a seminal work by Bandura (1997) which describes self-efficacy as "people's judgements of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391).

1.9   Organisation of the Thesis

Chapter One describe the background of the study and reviews the public sector in Malaysia. Then, the problem statement is explained leading to the development of the research questions and objectives for the study, followed by the scope and significance of the study. Lastly, the operational definition of each of the variables used in the research model is provided.

Chapter Two explains the literature review of the study. In particular, this chapter starts by describing the theory underpinning the study. Then, it provides a comprehensive review of the related topic of OCB, work-FC, family-WC, supervisory support, and self-efficacy based on the past literature. It also outlines the relationship between those

constructs based on the research model in this study. Then, hypotheses from each of this relationship are formulated and the conceptual framework of the study is provided.

Chapter Three covers the research methodology of the study. This chapter presents the research design of the study. This chapter also discusses in detail the unit of analysis, target population, sample size, and sampling procedure. Subsequently, the instruments of the variables of interest are described. Then, the questionnaire development process is explained followed by the procedure to collect the data from the respondent. The assessment of reliability and validity for the pilot study is shown. The data analysis procedure using partial least square - structural equation modelling (PLS-SEM) approach is described at the end of this chapter.

Chapter Four provides the results of the survey research conducted for the study. The chapter describes the process of preparing the data, as well as of dealing with reverse score items, missing values, and outliers' values. The chapter also presents the results of the normality test. The chapter further reports the demographic profile of the respondents based on the descriptive analysis. Then, multicollinearity analysis for the data is present. Next, the PLS-SEM analysis is explained in detail. The measurement model and structural model result are clearly described. The result of the PLS-SEM was used to test the hypotheses of this study.

Chapter Five discusses the findings of the study in view of the theoretical perspective and findings of previous studies. The chapter then discusses the results of the hypotheses testing.

Chapter Six provides a summary of the findings. Both theoretical and practical implications are described in the context of this study. Then, the limitations of the study are clearly described followed by few suggestions of future research. The conclusion of the study is provided.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The review of the literature is necessary in order to formulate the research model and present the hypotheses for this study. In this chapter, the discussions are based on the constructs identified such as organisational citizenship behaviour (OCB), work-family conflict (Work-FC), family-work conflict (Family-WC), supervisory support, and self-efficacy.

This chapter begins by focusing on the theoretical research background of Conservation of Resource (COR) theory as an underpinning theory for this study. Then, this chapter illustrates the conceptualisation of OCB as a dependent variable that is crucial to this research, including its definitions, its importance, and the review on established antecedents. The chapter then continues with the extant literature review on the concept of work-family conflict in an attempt to distinguish the concept into a bidirectional approach particularly between work-FC and family-WC. Then, this chapter provides a review on supervisory support as a potential determinant.

Next, based on the issues and past researches, the concept of self-efficacy is discussed to discover the nature of the construct. Ensuing the discussion is the discussion of the theory used in this study. Finally, the development of hypotheses based on the identified gaps from the past literature is discussed. The chapter ends with a concluding summary of the chapter.

2.2   Theoretical Research Background

The underpinning theory in this study is one that can explain the mechanism of the relationship between independent variables and citizenship behaviour. A theory is important to define, establish, and explain relationships between concepts and constructs based on the previous literature (Malhotra & Birks, 2007). This study utilised the conservation of resource (COR) theory (Hobfoll, 1989) to explain the relationship between work-FC, family-WC, and supervisor support towards OCB and self-efficacy a mediating variable, as explained in the following subsections.

2.2.1 The Conservation of Resources (COR) Theory

The conservation of resource (COR) theory was first coined by Hobfoll (1989). The fundamental concept of this theory is that "individuals are motivated to obtain, retain, foster and protect resources that are valued" (Hobfoll, 1989, p. 516). According to Halbesleben, Neveu, Paustian-Underdahl, and Westman (2014), resources are defined as "anything perceived by an individual to attain their goals" (p. 1338). Hobfoll (2001) grouped resources into four (4) categories: objects, conditions, personal characteristics, and energy. Hobfoll also developed the COR theory based on the central principles of (1) the primacy of resources loss and (2) resource investment.

The first principle, the primacy of resource loss, suggests that individual loss resource is more harmful than it is to gain the resource (Halbesleben et al., 2014). On the given equal amounts of loss and gain, resource loss is more salient and more impactful than resource gain (Hobfoll, Johnson, Ennis, & Jackson, 2003). In specific, resource loss might have an impact on individuals physiological, cognitive, emotional, and social

responses (Hobfoll, 2001). Likewise, individuals are more aware of resource loss than resource gain, thus enabling them to protect the available resource from further loss.

The second principle, resource investment, serves to protect against resource loss, to recover from losses, and to gain further resources (Hobfoll, 2001). Hobfoll (2001) first introduced four corollaries under the conservation of resource theory. Corollary 1 state that individual with resources has a greater opportunity to invest resources. Corollary 2 states that as individuals lose resources, investment becomes more difficult due to the future resource loss cycle. Corollary 3 states that as individual gain resources, they are likely to invest and gain additional resources (resource gain spiral). Corollary 4 denotes that the lack of resources leads to a defensive attempt to conserve available resources (Halbesleben et al., 2014; Hobfoll, 2001).

The COR theory was developed as a resource-oriented model based on the assumption that an individual would strive to retain, protect, and build resources to avoid the loss caused by potential or actual circumstances. According to Hobfoll et al. (2003), individuals would experience stress as a reaction when potential or actual resources are threatened, lack or fail to reclaim resource after an investment of resources. Due to the resource loss, individuals tend to protect their resources from further losses by avoiding from engaging in OCB, which can be resource-depleting (Bolino, Hsiung, Harvey, & LePine, 2015).

In a study by Halbesleben, Harvey, and Bolino (2009) on the view of COR theory in work engagement and work interference family, it is suggested that employees who feel engaged are more likely to go beyond by performing citizenship behaviour. The study also found that specific traits may act as resources themselves and enable individual to

manage, allocate and invest effectively the resources they possess. Hence, it is much helpful for understanding why employees engage in some type of performance that may help to maximize resource gains in a long term.

Most of the previous studies on organisational citizenship behaviour employed theories such as the social exchange theory (Khadija, Mirza, & Sami, 2014; Xerri & Brunetto, 2013), the self-determination theory (Kasa & Zaiton, 2016; Taylor, 2013), and the theory of planned behaviour (Chun-hsien, Fang-pei, Chin-yung, & Tao-sheng, 2014). Yet, very few of the previous studies have investigated organisational citizenship behaviour from the viewpoint of the COR theory. For instance, previous studies by Beham (2011), Lyu, Zhu, Zhong, and Hu (2016) and Kasa and Zaiton (2015) has been incorporated conservation of resource concept as an underpinning theory for the research model.

The COR theory is particularly useful for understanding the factors that influence reaction to OCB. The application of the COR theory is to explore the influence of organisational and individual factors on the extent of employee's behaviour. OCB may be a promising area for theoretical development as suggested by Karam (2011). Therefore, this research will fill the research gap by utilising the COR theory to examine the relationship between behavioural outcomes such as OCB and organisational and individual factors.

2.3   Organisational Citizenship Behaviour (OCB)

Research on organisational behaviour particularly on discretionary employee's behaviours has been studied for considerable period. Organisational citizenship behaviour has received much attention from researchers and practitioners and has become

the most popular topic in the literature (Ocampo et al., 2018). A few definitions have been proposed by the most prominent scholars in the study of OCB, as listed in Table 2.1. Chester Barnard (1938) (as cited in Qureshi, 2015) perceived these behaviours as "a willingness of persons to contribute efforts to the cooperative system" (p. 83). In another work published in 1964, Katz considered OCB as innovative and spontaneous behaviours that are not required by the formal job description but crucial for organisational effectiveness.

2.3.1 Definition of Organisational Citizenship Behaviour (OCB)

In 1988, Dennis Organ and his colleagues introduced the concept of "organisational citizenship behaviour"' or OCB as "individual behaviour that is discretionary, not directly or explicitly recognised by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation" (Organ, 1988, p. 4). Earlier study by Bateman and Organ (1983) defined OCB as "behaviours that include any of those gestures (often taken for granted) that lubricate the social machinery of the organisation" (p. 588). Examples of behaviour include individual helping co-workers with a job-related problem, following orders without complaint, and protecting and conserving organisational resources.

Furthermore, an individual would voluntarily perform extra task that were given or is expected to perform without any objection. Although the task is not required and demanded by the job functions or description, the individual is   still willing to participate and contribute on his/her own decision.

The concept of OCB implies a range of definitions of organisational citizenship behaviour. Table 2.1 presents some of the definitions made by previous scholars on the concept of OCB.

Table 2.1: Definition of OCB in the Literature

Author	Definition
Bernard (1938)	Willingness of persons to contribute efforts to the cooperative system
Katz (1964)	Innovative and Spontaneous Behaviours
Bateman and Organ (1983)	Behaviours that include any of those gestures (often taken for granted) that lubricate the social machinery of the organization
Organ (1988)	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

Previous researchers have used other terms to describe the OCB construct. For instance, OCB is also known as an extra-role cooperative behaviour (Katz, 1964), extra-role behaviour (Van Dyne, Cummings, & McLean Parks, 1995), pro-social organisational behaviour (Brief & Motowidlo, 1986), civic organisational behaviour (Graham, 1991), organisational spontaneity (George & Brief, 1992), contextual performance (Motowidlo & Schmit, 1999), perceived organisational membership (Masterson & Stamper, 2003), compulsory citizenship behaviour (Vigoda-Gadot, 2006), rewarded and unrewarded OCB (Korsgaard, Meglino, Lester, & Jeong, 2010), as well as discretionary OCB (DOCB), normative OCB (NOCB) and rule-bounded OCB (ROCB) (P. Agarwal, 2016).

Even though OCB is known in various terms, this construct shares the same conceptualisation with those identified by Barnard (1938), Katz (1964) and Organ (1988). Table 2.2 presents the summary of the terms of OCB used in the previous studies.

Table 2.2: Other terms of OCB used in the literature

Source	Terms	Definition
Katz (1964)	Extra-role cooperative behaviour	Innovative and spontaneous activity to achieve organisational objective beyond role specifications
Brief and Motowidlo, (1986)	Pro-social organisational behaviour	Performed by individual towards other individual, group or organisation with intention to promote welfare
Jill Graham (1991)	Civic organisational behaviour	Engaging citizenship research to identify specific substantive categories of citizen rights and responsibilities.
George and Brief, (1992)	Organisational Spontaneity	Helping co-workers, protecting the organisation, making constructive suggestions, developing oneself and spreading goodwill
Van Dyne et al. (1995)	Extra-role behaviour (ERB)	Behaviour beneficial to the organisation or intended to benefit the organization
Motowidlo and Schmit (1999)	Contextual performance	Volunteering to carry out task activities that are not formally part of the job
Masterson and Stamper (2003)	Perceived Organisational membership (POM)	Representing employee-organisation relationship and other relationship that may exist
Eran Vigoda-Gadot (2006)	Compulsory Citizenship behaviour	Behaviour that is forced and almost mandatory due to pressure to provide better services and become effect and competitive
Korsgaard et al. (2010)	Rewarded and unrewarded OCB	Employees goes beyond at work because of personal strength and drive

Source	Terms	Definition
P. Agarwal (2016)	Discretionary OCB (DOCB), Normative OCB (NOCB) and rule-bounded OCB (ROCB)	DOCB: Discretionary behaviour beyond the call of duty and not explicitly recognised by the organisation NOCB: Behaviour displayed due to peer pressure, strong norms and shared belief of the organisation ROCB: Elements of OCB are displayed because it is part of roles, responsibilities and performance evaluation of any formal requirement of the job.

2.3.2 Dimensions of Organisational Citizenship Behaviour (OCB)

Various authors have identified the dimensions of OCB, including Katz (1964), Smith et al. 1983), Graham (1991) and Podsakoff, Mackenzie, Paine and Bachrach (2000). Katz (1964) identified five dimensions under "innovative and spontaneous behaviour" namely (1) cooperating with other, (2) protecting the organisation, (3) volunteering constructive ideas, (4) self-training, and (5) maintaining a favourable attitude toward a company.

In 1983, Smith, Organ and Near found two major categories of OCB: altruism and generalised compliance. Smith and colleagues conceptualised altruism as a helping behaviour directed to other individuals in face-to-face situations while generalised compliance is doing the right things for the benefit of an organisation (Smith et al., 1983). Subsequently, Graham (1991) described OCB as having three dimensions: obedience, loyalty, and participation. Obedience is a level of employee's acceptance of organisational rules, procedures, and policies. Loyalty involves a degree of identification

of organisational interests and protects and puts it above and beyond one's own interests. Participation includes an employee's involvement in organisational activities and decision making.

Podsakoff et al. (2000) conducted a meta-analysis study on OCB construct and identified about 30 different behaviours form of OCB. Podsakoff et al. (2000) categorised these behaviours into seven themes: (1) helping behaviour, (2) sportsmanship, (3) organisational loyalty, (4) generalised compliance, (5) individual initiatives, (6) civic virtue, and (7) self-development. Podsakoff and colleagues also mentioned that the seven (7) dimensions are similar and reflective of the concept of OCB introduced by Katz (1964), Smith et al. (1983), and Organ (1988).

Specifically, Podsakoff and others (2000) defined *helping behaviour* as helping others to solve work-related problems. It involves assisting others to avoid any potential problems and exhibiting positive attitude toward co-workers. This definition provides a combination of Organ's (1988) OCB dimensions of "altruism" and "courtesy". Thus, Podsakoff et al. (2000) redefined *sportsmanship* based on Organ's (1988) definition as "willingness to sacrifice their personal interest for the benefit of the workgroup and not take it personally if the ideas are rejected" (p. 517).

Individual maintaining positive attitude even in the unfavourable situation and not feel offended if their suggestions is not accepted (Podsakoff et al., 2000). Besides that, the concept of *organisational loyalty* is similar to Van Dyne and his colleague's definition of loyalty. Organisational loyalty is described as maintaining and enhancing commitment and supporting organisation objectives (Shim, 2011). It consists of loyalty towards

organisation (Graham, 1991), including supporting and defending organisation objectives (Borman & Motowidlo, 1997).

Generalize compliance refers to employee's acceptance and compliance with the rules or regulations of an organisation. Examples of generalise compliance include organisational obedience (Graham, 1991) and compliance with organisational rules and regulation. *Individual initiatives* in Podsakoff's themes is similar to Organ's (1988) conscientiousness, which refers to individual behaviours beyond the ordinarily-expected requirements. This dimension involves making constructive suggestions, persisting problems, and challenges with enthusiasm (Borman & Motowidlo, 1997), and taking charge at work (Podsakoff et al., 2000).

Civic virtue refers to the commitment and active participation towards organisation governance and policymaking (Graham, 1991). It refers to the attitude of protecting an organisation from any threat and looking out for organisational opportunities even related to personal cost (P. Agarwal, 2016). Lastly, *self-development* refers to an employee's initiative behaviour in improving his/her knowledge, skills, competencies, and abilities. In specific, individuals seeking out advantages from advanced training courses, learning new skills to add value towards the organisation (George & Brief, 1992).

An additional subtype of OCB introduced by Korsgaard, Meglino, Lester and Jeong (2010) are "rewarded" and "unrewarded" organisational behaviour, which suggests that employees would engage to go above and beyond the ordinary at work and expect reciprocity from their exchange partner to ensure future benefits. Korsgaard et al. (2010) refers this behaviour as "paying me forward" or expected reciprocity and "paying you back" or the obligation to reciprocate mechanisms. This concept is based on the social

exchange theory which proposes that individuals who act to benefit others expect similar effort from the receiver in the future. Hence, an individual would act to help others as a norm of feeling obligated to reciprocate from the prior benefit given from others.

A more recent study by Dekas, Bauer, Welle, Kurkoski, and Sullivan (2013) also introduced a few dimensions of OCB, namely employee sustainability, social participation, civic virtue, voice, helping, knowledge sharing, individual initiative, and administrative behaviour. These dimensions were identified based on their study on the OCB-knowledge workers scale of citizenship behaviour.

In the same year, Lambert and Hogan (2013) identified three essential dimensions of OCB. First, OCB is not a role prescribed whereas citizenship activities are not included or described in a formal job description. Second, OCB may not benefit the person engaged in the OCB but may benefit other employees or an organisation. The third dimension is that there are no rewards associated with OCB since the discretionary behaviour is not recognised by an organisation's formal reward system. Hence, P. Agarwal (2016) consolidated the dimensions and elements of OCB from the previous literature, as shown in Table 2.3.

Table 2.3: Dimensions of OCB from previous literature

Source	Dimensions
Katz (1964)	Innovative, Spontaneous Behaviour
Smith, Organ and Near (1983)	Altruism, General compliance, civic virtue
Organ (1988)	Altruism, Courtesy, Conscientiousness, Civic virtue, Sportsmanship, cheerleading,
Graham (1991)	Interpersonal helping Obedience, Loyalty boosterism, organisational obedience, personal industry, individual initiative, organisational participation
William and Anderson (1991)	OCB towards individual (OCBI) and OCB towards Organization (OCBO)
Podsakoff, MacKenzie, Paine and Bachrach (2000)	Helping Behaviour, Organizational Compliance, Organizational loyalty, Sportsmanship, Individual initiative, Civic virtue, self-development
Korsgaard et al. (2010)	Rewarded and Unrewarded OCB
Zhang and colleagues (2011)	Altruistic, responsible, instrumental and compulsory OCB.

The most dominant concept of OCB was conceptualised by Organ (1988) and Williams and Anderson (1991). Organ (1988) conceptualised the OCB model as consisting of altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. The five dimensions are elaborated as follows:

1. Altruism: According to Bragger et al. (2005), altruism can be defined as a discretionary behaviour of assisting another person in organisation-related issue (p. 305). In particular, it describes the behaviour of voluntarily helping co-workers with a work problem, such as orientation of new employees or teaching co-workers on how to use new equipment (Podsakoff et al., 2000).

2. Conscientiousness: It refers to the behaviour of an individual in an organisation voluntarily following the rules and regulations of the organisation (Çavuş & Develi, 2017). An individual would perform duties and assist an organisation beyond the minimum requirements, for example, a behaviour that is beyond the minimal level of punctuality, time management, and attendance.

3. Sportsmanship: It refers to the willingness of an employee to tolerate less than ideal situations without complaining (Vigoda-Gadot, 2006). Similarly, an individual copes and not expresses or shows negative feeling when he/she is faced with uncomfortable situations due to events not going as planned or expected (Adewale & Ghavifekr, 2019).

4. Courtesy: As mentioned by Organ (1988), courtesy is a behaviour of "providing assistance to others to avoid any problem and taking helping others to avoid any problem taking advance steps to mitigate the problem" (p. 295). Specifically, it refers to the individuals behaviours that aim to prevent the occurrences of work-related problems with others within an organisation (Salehzadeh, Shahin, Kazemi, & Barzoki, 2015). These behaviours include assisting in preventing, as well as in taking proactive and considerate action to solving the problems.

5. Civic virtue: Civic virtue refers to the behaviours that show the participation of individual responsibility or involvement in the nature of the organisation. It refers to a behaviour of engaging in the life of an organisation (Klotz et al., 2018; Podsakoff et al., 2009), for instance, employees who actively participate in organisation affairs such as attending meetings, responding to email, and following organisational issues.

Williams and Anderson (1991) proposed another conceptualisation of OCBs by categorising the concept into the direction of the behaviours. OCB-Individuals (OCBI) denotes behaviours as being directed towards other individuals benefits whereas OCB-Organisation (OCBO) is behaviours that are directed towards the benefit of an organisation. An example of OCBI is assisting absent employees in their work and accommodating the needs of other employees. OCBI is in line with other dimensions, such as altruism, helping behaviour, and civic virtue (Organ, 1988; Podsakoff et al., 2017)

Another conceptualisation of OCB introduced by William and Anderson (1991) is OCB-Organisation (OCBO). OCBO involves adherence to an organisation's rules and regulation and maintaining of order and attendance at work. Therefore, OCBO is also similar to the concept of (1) courtesy, sportsmanship, and conscientiousness as proposed by Organ (1988); (2) general compliance (Smith et al., 1983), and (3) organisational loyalty (Van Dyne et al., 1995).

Klotz et al., (2018) suggested that employees in different organisations may engage in different pattern of citizenship which depends on organisation context. Despite mange different types and measures of OCB, there has been relatively little inconsistency in the types of OCB that researchers tend to investigate (Harvey, Bolino, & Kelemen, 2018). As mentioned by LePine, Erez, and Johnson, (2002), various types of OCB are highly correlated and share common correlates, therefore, there may be little value in distinguish between them.

Despite the introduction of various types of organisational citizenship behaviour by current researchers, Organ's five dimensions of OCB are still considered the most

significant concept to be used in an attitudinal and behavioural research (Adewale & Ghavifekr, 2019). This concept has been widely used in the OCB research (Podsakoff et al., 2000), and despite the vast on-going definitional revisions, the core concept of OCB remains unchanged as it refers to any discretionary efforts from employees, which often lies beyond specified contractual obligations (Organ, 1988).

2.3.3 Determinants of Organisational Citizenship Behaviour (OCB)

Recently, Ocampo et al. (2018) identified more than 200 articles on OCB being published in the top journal. The number has also increased in the past twenty years since OCB studies was introduced in the 1983. Previously, Podsakoff et al. (2009) noted that no fewer than 400 articles have been published on OCB and its related constructs. The most prominent determinants of OCB identified from the literature are job satisfaction (Khadija, Mirza, & Sami, 2014; Sharma, Bajpai, & Holani, 2011), leadership (Carter, Mossholder, Feild, & Armenakis, 2014), organisational commitment (Cetin, Gürbüz, & Sert, 2015), human resource management practices (Seemi Azam & Kumar, 2016), and organisational support (Chen, Yu, Hsu, Lin, & Lou, 2013).

Researcher Podsakoff et al. (2009) then categorised the antecedents of OCB into four categories: personal characteristics, task characteristics, organisational characteristics, and leadership behaviours. In a latest meta-analysis review on the antecedents of OCB, Podsakoff et al. (2017) identified over 120 different multilevel antecedents in the existing literature. These antecedents were grouped into few categories namely manager/leader characteristics, group characteristics, member perceptions, attitudes, beliefs, and values, climate-related variables as well as organisational characteristics. A brief description of each category is provided below:

a) *Personal characteristics*: Bateman and Organ (1983) and studies on personal characteristics have focused on two main causes of OCB. The first cause is a "moral" factor, which includes satisfaction with job, commitment towards organisation, and fairness and leader supportive perception (Podsakoff et al., 2000). Role perception such as role ambiguity and role conflict has been found to be significantly related to OCBs (Qureshi, 2015).

b) *Task characteristics*: Task characteristics consist of task feedback, task routinisation, and intrinsically satisfying task. Previously, Chen and Chiu (2009) found task characteristics to be significantly related to the dimensions of OCB, such as altruism, courtesy, conscientiousness, sportsmanship and civic virtue. Although task characteristics has received less attention in the OCB literature, Podsakoff et al. (2000) consider the factor to be an important determinant of OCB.

c) *Organisational characteristics*: The major form of organisational characteristics are organisational formalisation, organisational inflexibility, staff support (Podsakoff et al., 2000), distributive and procedural justice (Qureshi, 2015). Previous research on the link between organisational characteristics and OCB were inconsistent. According to Borman (2004), OCB can be enhanced by group goal setting, high level of procedural justice, leaders with a supportive environment, and practising citizenship behaviour.

d) *Leadership behaviours*: Leadership behaviour can be divided into transformational leadership behaviours and transactional leadership behaviour. Transformational leadership inspires subordinates to perform beyond than original

expectation (Bass and Riggio, 2010). Transactional leadership behaviour can be explained as leaders create a cost-benefit interaction in the community results in employee act accordingly under such influence (Talat, Saif, Azam & Ungku Norulkamar, 2012).

In conclusion, previous empirical researches on the antecedents of OCB have largely focused on the categories as identified above. These variables are the most frequent and widely studied antecedents of OCB, and the previous meta-analytic studies have shown that all of them have significant relationships with OCB (Podsakoff et al., 2017; Podsakoff et al., 2000). Therefore, the present study attempts to extend the current literature on the OCB antecedents by incorporating individual factors such as work-FC and family-WC, and an organisational factor such as supervisory support.

The present study also includes the important factor of self-regulatory variable (Bandura, 1997) such as self-efficacy as the mediator variable. Self-efficacy is an important variable and a strong predictor to consider when engaging in a proactive behaviour such as OCB (López-Domínguez, Enache, Sallan, & Simo, 2013; Ocampo et al., 2018).

Despite determining the actual reasons for individuals engaging in OCB has received a substantial amount of attention from previous scholars, limited research has been conducted on the antecedents that affect OCB, although a link has been established between OCB and organisational performance (Demir, 2015; Somech & Drach-Zahavy, 2000).

2.4   Organisational Citizenship Behaviour (OCB) in the Public sector

The discussion of citizenship behaviour as a part of behavioural outcome emerged during the previous decade (S. Agarwal, 2016). Much of the discussion centred on the citizenship behaviour in the public sector which relies mainly on organisational management and human behaviour in implementing discretionary behaviour activities within the organisations (Anwar, Osman-Gani, Fontaine, & Rahman, 2017). Most of the previous studies on OCB in the public sector were conducted in developed countries such as United States (Caillier, 2016), France (Molines, Sanséau, & Adamovic, 2017), Spain (Salas-Vallina, Alegre, & Fernandez, 2017), Australia (Taylor, 2016), Middle east countries (Abdelmotaleb & Saha, 2019; Alhyasat, 2012; Khadija Mushtaq et al., 2014; Rabenu, Tziner, & Sharoni, 2017), and Nigeria (Ayinde & Oladele, 2016; Ugwu, Amazue, & Onyedire, 2017).

In Asia, studies on the OCB in the public sector have been conducted in China, Taiwan, India, Indonesia, and Korea. For instance, Sharma et al. (2011) compared the OCB in the public sector and private sector in India and concluded that OCB is much higher among public sector employees compared to private sector employees. The authors then attributed high competitiveness in the private sector as the factor hindering the employees from engaging in OCB. The employees in government organisations, on the other hand, were seen as being motivated by a concern for the community and a desire to serve the public interest.

In another study by Cun (2012) on the differences of public service's motivation on citizenship behaviour among employees in China, significant differences were found in regard to the motivation of groups in the public service, particularly on the consequences

variable of OCB. The findings suggest that the motivation of public service significantly influenced OCB. With a better service towards the public. With a better service towards the public, the career choice of a public service personnel and any professional preparation might increase employees' job satisfaction thus resulting in increased OCB. In a more recent study by Abdelmotaleb and Saha (2019), personal characteristics such as public service motivation were also found to be critical in enhancing employees' positive work behaviours (OCB).

An earlier study by S. Kim (2006) found distinguishable dimensions of OCB in the Korean context and evidence of relationships between public service motivation, job satisfaction, and organisational commitment. Another study in Korea by Shim and Faerman (2015) among public employees in the local government found that the self-concept-related variables (such as public service motivation, subjective OCB norms, and organisational identification) has consistent significant relationship with OCB. Another study by Campbell and Im (2016) was on the determinants of OCB in Korean government context such as public service motivation, turnover intention, and job satisfaction. The study found that public service motivation and job satisfaction were the strong predictors of OCB among the front-line employees.

Additionally, Handayani, Udin, Yuniawan, Wikaningrum, and Supriyati (2018) conducted a study to investigate the link between transformational leadership, psychological empowerment, and affective commitment towards OCB in the Indonesian public sector. The study found that transformational leadership and psychological empowerment is positively related to OCB but not to affective commitment. Specifically, transformational leadership builds a work environment in which employees feel motivated, competent, and independent to experience psychological empowerment, thus

encouraging them to show innovation and creative new ways to perform a task. Hence, employees with high psychological empowerment would feel comfortable with a task and regard it as challenging, and they would be able to perform better and show higher OCB. Previously, Shahnawaz, Jafri, and Hassan (2009) also found the difference between the psychological capital in Indian public and that in private organisations.

In summary, the literature suggests that some of the previous studies on OCB mostly were conducted in Asian counties. Nevertheless, the relevant studies conducted in Malaysia have yet to examine the OCB in public sector organisations and its determinants, which is the case of concern in the present study.

2.5   Organisational Citizenship Behaviour (OCB) in Malaysia

Public administration research in Malaysia contains a limited number of OCB studies compared to those pertaining to the private sector, educational institutions, and public services organisation. Most of the OCB literature appear to focus on commercial settings, such as public services (Kasa & Zaiton, 2016; Khalid et al., 2009; Aizat, Ahmad, & Tan, 2016), financial institutions (Jihad, Farzana, & Rosmini, 2016; Jim et al., 2013; Talat, Mubbsher, & Fida, 2016), and manufacturing industry (Naqshbandi et al., 2016) rather than those who work in bureaucratic systems such as a government organisation. This is contrast with the fundamental concept of public administration in that OCB plays a major role in public sector organisation since citizenship is strongly related to the goals and visions (Vigoda-Gadot & Beeri, 2011).

In a study conducted by Choon, Ali, and Azman (2012) in public education industry in Malaysia on the effect of organisational culture and performance appraisal process on

OCB, the study found organisational culture has a significant impact on employees OCB. It is also suggested that performance appraisal process can influence employee's citizenship behaviour to go beyond current task. In another study conducted by Yahaya et al., (2011) in private and public sector in Malaysia on the implications of OCB towards learning organisation. the study concluded that three dimensions of OCB namely altruism, courtesy and civic virtue showed a significant relationship with learning organisation. Specifically, employees with high civic virtue are sensitive and able to adapt with work environment. High courtesy will allow employees to feel urge to succeed and confident in taking action. This helps organisational members to avoid problems from occurring and treating others with respect.

According to Taylor (2013), public service works emphasise on the importance of citizenship behaviour that can improve the social and psychological environment for better public service delivery. Within the Malaysian context, there is a scarce research of published works regarding the OCB (Lo & Ramayah, 2009; Tharikh, Ying, Mohamed Saad, & Sukumaran, 2016). Therefore, the present study attempts to bridge the gap by providing additional insight of OCB in a non-commercial setting, particularly in the government context in Malaysia.

As mentioned, this research attempts to investigate the role of OCB in the public sector as it is particularly critical and useful in enhancing governmental effectiveness, overcoming bureaucracy weaknesses, and encouraging the performance of work units (Vigoda-Gadot & Beeri, 2011). By demonstrating OCB, public sector operations can be managed with efficiency, and service will be delivered with higher quality by exhibiting the positive actions associated with OCB with stakeholders and the public (Rashidah, Mazuri, & Ahmad Munir, 2013).

Due to the limited research on the related antecedents of OCB particularly in Malaysia context (Choon et al., 2012), previous empirical studies that used similar variables and that offer similar implications towards OCB are discussed here. A few of studies have identified a similar construct of supervisory support as a predictor of OCB. For instance, Abdullah et al. (2015) explored the relationship between perceived organisational support (represents supervisory support) and OCB among 300 employees in a private sector organisation in Kedah, Malaysia. The study found a positive significant relationship between perceived organisational support and OCB. Perceived organisational support represents 60% variations, which indicates a high relevancy in understanding OCB. It is also suggested that support from the organisation is important to foster job security, reduce stress, increased self-esteem, and a healthy working environment.

In addition, Ali, Abu Daud, Aminah, and Bahaman (2008) found a positive relationship between perceived organisational support and OCB among employees in five ministries in Malaysia. The study suggests that employees who believe that they perceive higher support from organisation (supervisor) will feel obligated to reciprocate a good treatment and assist the organisation in meeting its objectives through positive attitudes and behaviours. The study concluded that a supervisor should maintain a good leadership behaviour by trading emotion, loyalty, and contribution to enhance employee commitment and perform OCB.

In another study, Rashidah et al. (2014) examined the role of Leader-Member exchange (LMX) in increasing OCB in a local government in Malaysia. LMX refers to the quality relationship established with leaders and subordinates through a series of

work-related exchanges. The authors examined the dimensions of LMX such as affect, loyalty, contribution, and professional respect and found that affect and loyalty have a weak correlation with OCB in the organisation, while the contribution and respect dimensions of LMX had a direct relationship with OCB. The result suggests that LMX and OCB must be continuously fostered and enriched among the employees to produce a positive behaviour such as OCB (Rashidah et al., 2014). In a meta-analysis study by Cropanzano and Rupp (2008) on the social exchange concepts towards OCB and job performance (based on the social exchange theory), perceived organisational support and leaders member exchange were found to impact employees' subsequent attitudes, OCBs, performance, and turnover intentions.

Another study was conducted by Tan, Dahlia, and Yuhanis (2016) on benevolent leadership and OCB in the hotel industry in Malaysia. Similar to the concept of supervisory support, benevolent leadership was described by Karakas and Sarigollu (2012) as a "process of creating a virtues cycle of encouraging and initiating positive change in the organisation through ethical decision making, creating sense of meaning, inspiring hope and fostering courage for positive action" (p. 537). Tan et al. (2016) found a positive significant relationship between benevolent relationship and OCB.

To conclude, very limited studies have been conducted to explain the reason for public employees being inclined towards proactively engaging in citizenship behaviour while facing unsatisfactory working conditions (Norasherin et al., 2016). Hence, the review of literature revealed that studies on OCB in the public sector have received relatively little attention from the previous researchers in organisational studies (Mazli, Roziah, Maimunah, & Bahaman, 2013). Very few have been conducted in the Malaysian context to the extent that more empirical research is needed to provide insights on how

the public employees engaged in OCB (Ali et al., 2008). Such dearth of study necessitates a study to bridge the gap in the existing literature.

2.6   Work-family Conflict (Work-FC)

2.6.1 Work-family Conflict Definition

Work-family conflict was established based on the concept of role conflict introduced by Kahn and his colleagues in 1964. According to Kahn et al. (1964), role conflict is the two simultaneous occurrences of pressure in which compliance with one role would make it more difficult to comply with other roles. For instance, an individual would find it difficult to fulfil family obligations due to long working hours, or he/she would experience stressful events at home which might affect how he/she performs at work.

Based on this fundamental above, Greenhaus and Beutell (1985) introduced and defined work-family conflict concept in their seminal work as "a form of inter-role conflict in which the role pressures from work and family domain are mutually incompatible in some respect" (p. 77). Specifically, when an individual has limited time, energy, and skills to spend in various life domains, such as work and family, they will have to ignore the demands of one domain (work) in order to fulfil the demands of another domain (family) and vice versa. As a result, the imbalance of role participation between work and family may cause conflict within individual since both domains are crucial (Greenhaus & Powell, 2003).

Furthermore, work-family conflict was viewed as two constructs namely work-family conflict (Work-FC) and family-work conflict (Family-WC) (Greenhaus & Beutell,

1985; Frone, 2003). Previous empirical studies nevertheless have found that the distinction between the two constructs is important because the two types of construct have different antecedents and consequences (Frone, Russell, & Cooper, 1992; Mesmer-Magnus & Viswesvaran, 2005).

The difference of these two concepts is supported by a meta-analysis studies conducted by Amstad, Meier, Fasel, Elfering, and Semmer, (2011) and Shockley and Singla, (2011) about the direction of work-family conflict. Past studies have suggested that the two concepts may have different causes and effects (Frone et al., 1992; Kelloway, Gottlieb, & Barham, 1999). In a more recent study by Haslam, Filus, Morawska, Sanders, and Fletcher (2014), work-family conflict was identified as two distinct but related constructs.

Therefore, following the recommendations of past studies, this study incorporates both work-family conflict and family-work conflict as distinct variables and will be analysed separately to provide a comprehensive result. Work-FC refers to the demand or responsibilities in the work domain that interferes with the demand or responsibilities in the family domain, whereas family-WC refers to the demand or responsibilities in the family domain that interferes the demand and responsibilities in the work domain (Amstad et al., 2011; Ng & Feldman, 2012).

In addition, various researchers have used different terminologies when referring to the distinct constructs of work-family conflict. For instance, interchangeable terms were introduced such as work-to-family conflict (WFC) and family-to-work conflict (FWC) (Haslam et al., 2014; Lu, Kao, Chang, Wu, & Cooper, 2008; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011; Pal & Saksvik, 2008), Work interference with family (WIF) and

family interference with work (FIW) (Amstad et al., 2011; Baltes & Heydens-Gahir, 2003; Frone et al., 1992; Livingston & Judge, 2008) and work-home interference (WHI) and home-work interference (HWI) (Peeters, Montgomery, Bakker, & Schaufeli, 2005). Given these options, the present study adopts the term *work-family conflict* (Work-FC) and *family-work conflict* (Family-WC) similar to the distinction made by Carlson et al. (2000) and Frone et al. (1992) because the term is widely used in the work-family literature and more directly and explicitly shows the direction of the two conflicts.

According to Michel et al. (2011), the antecedents for work-FC are mainly from work domain variables while the antecedents for family-WC are mainly caused by family-related factors. Examples of work domain variables include working hours, role ambiguity, and role overload (Aizzat & O'Driscoll, 2012; NurIzzaty et al., 2016; Surena & Sabitha, 2011) while family-related factors include marital satisfaction, family support, and parental demand (Ahmad et al., 2010; Mahayudin & Azahari, 2015).

The discussion above can provide an understanding of the importance of (1) conceptualisation of work-FC and (2) the theory used in this study, particularly in an attempt to understand organisations. The following subsection discusses more specifically the two conflicts in both directions: work-family and family-work.

2.6.2 Types of Work-family Conflict

Work-FC is multi-faceted in three forms consisting of time-based, strain-based, and behaviour-based conflict (Carlson, Kacmar, & Williams, 2000; Greenhaus & Beutell, 1985). The three forms of work-family conflict can be explained as follows:

a) *Time-based conflict* is based on the assumption that time is limited per se; it means that the more an individual allocates time to a given role, the less time for him/her to commit to the demands and responsibilities in other roles (Huffman, Olson, O'Gara, & King, 2014). Therefore, individuals with limited time would attempt to fulfil the demands in one domain, resulting in depleted resource available to be invested in the other domains (Haun et al., 2011).

b) *Strain-based conflict* occurs when a strain symptom from one domain spills over and interferes with another domain. An individual who experiences stress from work produces strain for an employee to fulfil responsibilities in the family domain (Bradshaw, 2014). For instance, individuals might be affected by physical or emotional demands resulting from engaging in one role and inability to attend to another role(s) (Olson, Huffman, Leiva, & Culbertson, 2013).

c) *Behaviour-based conflict* occurs when the specific behaviours associated in one role may be incompatible with the expected behaviour in another role (Tennakoon, 2015), for instance, employees who are expected to be self-reliant, aggressive, and objective in the workplace. However, in another role, employees are expected to be a warm, nurturing, emotional, and vulnerable within family members (Koosvesheni, 2010).

2.6.3 Cross-domain and Matching-domain Perspective Approach

Research on work-family domain has used the term *matching-domain* and *cross-domain* implying that work-interference family affects family outcome, and family-interference work affects work outcome (Frone et al., 1992). According to Amstad et al.

(2011), *matching-domain* hypothesis refers to the primary effect of work-family conflict that resides in the domain form which the conflict originates. In specific, work-FC should have a stronger effect on work-related outcome whereas family-WC has a stronger effect on family-related outcome. The rational of this assumption as mentioned by Amstad et al. (2011) refers to the individual appraisal at the attributional processes whereby he/she is likely to dwell on the causes of the unpleasant situation, which will result in emotional reactions (conflict).

On the other hand, *cross-domain* hypothesis as implied by Frone, (2003) posits that an increased role on individuals reduces their ability or willingness to fulfil the responsibilities in other role. Following the model proposed by Frone et al., (1992), it is concluded that work-related stressors results in work-FC that have a negative effect on family-related outcomes whereas family-related stressors result in family-WC and have an effect on work-related outcomes. Previous study by Ford, Heinen, And Langkamer (2007) supports that the proposition of role stressors specific to the work and family domain is related to the outcome outside from those domain. This is also confirmed by another empirical study by Li, Lu, and Zhang, (2013) on the notion of cross-domain perspective that the primary effect of work-FC and family-WC occurs within the receiving domain. The study concluded that work-FC does not have an effect on work-related outcomes, which suggests that the cross-domain perspective is more applicable compared to the matching domain perspective.

There is still an ongoing debate about the primary outcome of work-FC and family-WC which lies within the originated domain (matching-domain) or within the other domain (cross-domain relationships). The possible connection between work-FC and self-efficacy and OCB has been partially implied in previous empirical studies. Findings

from previous studies suggest that the self-efficacy of employees with high work-family conflict can be negatively affected at workplace (Smoktunowicz, Cieslak, & Demerouti, 2017; Tang & Chang, 2010). In another study, Beham (2011) and Xia, Zhong, Wang, and Tiong (2018) concluded that a bidirectional work-family conflict would increase employees' citizenship behaviour towards an organisation. In a current meta-analysis, a limitation is noted in providing a complete test from both matching and cross-domain perspectives (Nohe, Meier, Sonntag, & Michel, 2014). Given this gap in the existing meta-analyses, this study attempts to provide a more comprehensive picture by analysing the relationship in both directions of work-family conflicts on work-related outcome.

2.7   Family-work Conflict (Family-WC)

Previous researchers including Mesmer-Magnus and Viswesvaran (2005) and Michel, Kotrba, Mitchelson, Clark, and Baltes (2011) conducted a meta-analysis study of work-family conflict and introduced a distinct concept namely family-work conflict (family-WC). According to Netemeyer et al., (1996), family-WC refers to "a form of inter-role conflict in which the general demands of time-devoted to, and strain created by the family interfere with performing work-related responsibilities" (p. 401).

Similar to work-FC, there are three (3) dimensions of family-WC as proposed by previous researchers (Carlson et al., 2000; Frone et al., 1992; Greenhaus & Beutell, 1985): strain-based conflict, time-based conflict, and behaviour-based conflict. Strain-based conflict refers to the strain experienced in fulfilling family demands intrudes with work responsibilities, for instance, being on time at the workplace, accomplishing daily task, travelling from work, and attending meeting outside regular working hours (Griep et al., 2016).

Time-based conflict states that individuals with a limited time are unavailable to fulfil work responsibilities due to family demands. Individual with limited time and resources are unable to perform work responsibilities due to interference from family demand. These individuals may have to attend family demand while at work such as bringing children to clinic because of health problem, pick up children from school, or receive call from family members.

Behaviour-based conflict depicts a certain behaviour that is expected in one role yet is not compatible in another role (Carlson et al., 2000; Greenhaus & Beutell, 1985). Specifically, individuals would perceive difficulties in adjusting a behaviour performed in one role to be compatible with a behaviour required in another role, thus resulting in behavioural-strain. For instance, individuals are expected to be loving, warm, and nurturing at home and aggressive, firm, and objective at work. These employees might experience a behavioural-based conflict between work and home interface when they are having difficulties hence being unable to adjust the required behaviours at work and at home.

Besides, individuals occupied with family roles and responsibilities and at the same time have the difficulty to fulfil work responsibilities will results in conflict between family and work. Hence, family-WC may occur less frequently compared to work-FC (Frone et al., 1992). Factors that contribute to the family-WC are number of children, family or nonwork involvement, hours spent in nonwork, and marital status (Byron, 2005). Hence, family-WC is not only applicable to parents but also to single individuals who face a different pressure (Ten Brummelhuis & Van der Lippe, 2010). Grant-Vallone and Donaldson (2001) concluded that employees who perceive various family situations

can experience high level of conflict between family and work and therefore, the problem is not exclusively a problem for employees with traditional family responsibilities.

Family-WC is included in the current study for a few reasons. First, only a few empirical studies have distinguished work-family conflict into two distinct variables (Carlson et al., 2000; Zhang, Siu, Hu, & Zhang, 2014). The work-family conflict introduced by Greenhaus and Beutell (1985) can be examined bidirectional as found by Frone et al. (1992, 1997) since both may have a unique set of consequences that can be assessed separately (Sanaz, Khadijah, & Syaqirah, 2015). Secondly, to the researcher's knowledge, no substantial research has been conducted on family-work conflict and OCB in Malaysia, and on the public sector specifically. As conclusion, it is crucial and required to articulate the differential effects of work-FC and family-WC on employees' behaviour, and their differential indirect effects on individual factors.

2.8 Supervisory Support

According to Eisenberger et al. (2010), supervisors are the representative of an organisation and therefore their positive evaluation of their employees has been associated with the latter's job satisfaction, reduced stress, work-family enhancement, and greater job-involvement and engagement. Employees who received support view their contribution as being valued and cared; they are reassured that help is available when is needed to cope with a stressful environment in order for them to give an effective performance (Bakker & Demerouti, 2007; Hammer, Kossek, Bodner, & Crain, 2013). This is aligned with organisational support theory that states that employees would develop perception of how much their organisation values their input and cares for their welfare (Eisenberger, Malone, & Presson, 2016). Specifically, perceived organisational

support with effect leadership, favourable human resource practices and desirable job condition and fair treatment signal employees that the organisation are ready to provide support and to reward increased performance. These employees would in turn feel obligated to respond favourably to the positive treatment they received and become more inclined to care about organisational goals.

According to Carlson and Perrewe (1999), support is "an interpersonal transaction that involves emotional concern, instrumental aid, information or appraisal" (p. 514). Individuals who perceive conflict in job but at the same time receive support from colleagues or supervisors may have their anxiety or stress reduced. Hence, supervisors in an organisational leadership role is viewed as a greater source of organisational support, which plays an important role in providing organisational rewards and resources to employees (Kurtessis et al., 2017).

Supervisors is responsible for communicating information on organisational goals and values, implementing policies, scheduling work, setting performance standards, and evaluating performance for subordinates (Nahum-Shani, Henderson, Lim, & Vinokur, 2014). Gagnon and Michael (2004) defined supervisory support as "the degree to which an employee perceived support from their supervisor" (p. 173). According to Duxbury and Higgins (1994), supervisor support is one of an important source under the organisational support on the benefits of workplace adjustment. In fact, support from supervisor plays a significant role in controlling employees promotions, pay increase, and work conditions, which creates either a supportive or disruptive environment in the workplace (Hsu, Chen, Wang, & Lin, 2010).

Similarly, supervisory support is described as employees' belief regarding the support and recognition received from supervisors in exchange of the former's efforts (Khan, Mahmood, Kanwal, & Latif, 2015; Maertz, Griffeth, Campbell, & Allen, 2007). Previously, supervisory support has been conceptualised into two dimensions: instrumental support and emotional support (Frone et al., 1997). Instrumental support is a type of support expressed through tangible actions, e.g., helping behaviour; emotional support is the supportive actions with empathy like listening to problems and sharing advice (Houle, Chiocchio, Favreau, & Villeneuve, 2012).

Work environment support is an important resource that enables employees to cope or reduce the negative effects of various stressors within the organisational environment (Botha, 2007). Thus, supervisor support is one of the major sources of social support for employees besides co-worker support and organisational support (Argyle, 1999; Kim, Hur, Moon, & Jun, 2017). According to Kurtessis et al. (2017), supervisor support is the component of all leadership behaviours that are mostly related and has a stronger relationship with perceived organisational support. In a meta-analysis study by Cole, Bruch and Vogel (2006), supervisors were considered as representative who act as a spokespersons for the organisation; they can give positive treatment and available support towards their employees whenever needed.

Previous studies have found that supervisor support is significantly related to job satisfaction (Armstrong, Atkin-Plunk, & Wells, 2015; Bagger & Li, 2014; Hsu, 2011; Tang, Siu, & Cheung, 2014), affective commitment (Bishwajit, Khumyu, & Boonyanurak, 2016; Casper et al., 2011; Paillé, Grima, & Bernardeau, 2013) and employees well-being (Lizano, Hsiao, Barak, & Casper, 2014). In contrast, supervisor support was found to have a negative relationship with work-family conflict (Kossek,

Pichler, Bodner, & Hammer, 2011; Wang & Li, 2008) and turnover intention (Dysvik & Kuvaas, 2013). Furthermore, an employee who perceives high supervisory support is likely to increase his/her effort and demonstrate extra-role behaviour which exceeds his/her responsibilities in return of the benefits given by the supervisor.

Previous studies have also shown that supervisory support could be a potential factor that influences employees' OCB. According to Lee, Kim, and Kim (2013), support from a supervisor can increase employees' OCB. However, very limited studies have examined whether supervisor's support affects individual's OCB towards an organisation (Wang, 2014) hence the lack of in-depth understanding based on any existing evidence. In a meta-analysis study by Kurtessis et al. (2017), perceived organisational support from supervisors was found to be positively related to increased performance in job activities among employees, which resulted in the latter's enhanced in-role and extra-role performances.

In the Malaysian context, a study was conducted by Ibrahim, Sulaiman, Hafidz, and Aziz (2016) on 282 public services employees found that a supportive supervisor in an organisation can encourage employees to perform citizenship behaviour. A supportive environment within an organisation would enhance employees' confidence to perform extra-role behaviour, such as OCB, while improving organisational productivity.

In summary, previous studies have explained the concept of supervisory support and the findings have led the present study to posit that supervisory support plays a critical role in employees' behaviour and in determining whether they are capable of coping effectively in managing resources.

2.9   Self-efficacy

There is a growing interest in the notion of personal resources such as self-efficacy (Rhee, Hur, & Kim, 2017; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Self-efficacy refers to self-regulatory mechanisms on social-cognitive theory, which is defined as "an individual belief in his or her ability to organise and execute the actions required to produce given attainments" (Bandura, 1997, p. 3). Specifically, self-efficacy is "the belief that one can perform specific tasks and behaviour" (Schwoerer, May, Hollensbe, & Mencl, 2005, p. 112). In addition, Zorlu (2012) viewed self-efficacy as a "self-assessment of the belief and attitudes towards the accumulation of abilities and knowledge owned to what is expected of them" (p. 3017). In other words, self-efficacy is considered as individuals' self-belief in their capabilities to perform certain tasks within certain conditions to achieve goals (Gannouni & Ramboarison-Lalao, 2018).

Self-efficacy is a state of self-regulation of which individuals develop self-disciplined behaviour and seek to improve their performance (Barbaranelli, Paciello, Biagioli, Fida, & Tramontano, 2018). An individual with higher self-efficacy has a higher self-confidence and positive attitude in performing his/her work (Ballout, 2009). With a confident and positive attitude, individuals are less likely to perceive stress and anxiety caused by negative environmental and psychological situations (Liu, Cho, & Eka, 2017). According to Graham and Weiner (1996), self-efficacy is a good measurement to predict behavioural outcomes compared to any other motivational construct.

Self-efficacy is described as an individual's capacity to master specific domains of action. Specifically, self-efficacy enhances individual capacity to successfully dealing with work roles opportunities and challenges. An individual with self-efficacy sets higher

goals and becomes more perseverance to achieve the goals and perform better than individuals with low self-efficacy (Bandura, 1997; Leon-Perez et al., 2011). Self-efficacy might influence an individual's evaluation of perceived situation or rules and procedures, and as a result, will affect the decisions and behaviours at work (D'Amato & Zijlstra, 2008). This is aligned with the notion that the individuals who are highly efficacious will activate sufficient efforts and provide successful outcomes (Bandura, 1986).

Previous studies have investigated the importance of self-efficacy and how it affects behaviours and attitudes. For instance, one study found that self-efficacy influenced attitude towards organisational change (Nwanzu & Babalola, 2019) and pro-environmental attitude (Wai, Bojei, Osman, & Hashim, 2018). Other studies have examined the influence of self-efficacy towards positive behaviour, such as knowledge sharing (Le et al., 2019; Muhammad Sabbir, Mahafuz, Md Afnan, Mahmud, & Hasliza, 2018; Tangaraja et al., 2015), work engagement (Chan et al., 2015; Ladyshewsky & Taplin, 2018; J. Liu et al., 2017; Pati & Kumar, 2010), and OCB (Adewale & Ghavifekr, 2019; Ajat, Mukhneri, & Mochamad, 2019; Kao, 2017; Zubair, Muhammad, Zafar, & Hafiza, 2019).

Previous studies have argued that self-efficacy enhances OCB. It was found that self-efficacy has a positive influence on OCB (Bandura, 1977; Cohen & Mohamed Abedallah, 2015; Kao, 2017). In a recent meta-analysis study on the antecedents of OCB, Podsakoff et al. (2017) identified self-efficacy as a potential antecedent of OCB, and the factor was then treated as a mediator for the relationship among the antecedents of OCB. Self-efficacy is also considered to be one of the most proximal determinants of behaviour due to its role in regulating cognitive, motivational, and emotional processes (Bandura, 1986). Other scholars have stressed the importance of understanding the effects of limits

of self-efficacy and the context of which it makes a greater contribution to individuals' attitudes and actions (Ozyilmaz, Erdogan, & Karaeminogullari, 2017).

The value of self-efficacy has been extensively recognised in a variety of life domains including work context. Self-efficacy influences individuals' emotional experience and well-being and exerts a protective role by contrasting antisocial behaviour and promoting prosocial behaviour such as OCB (Bandura, 2006). However, examinations of self-efficacy as a mediating variable between the relationship of individual and behavioural factors towards behavioural outcome remain scarce (Barbaranelli et al., 2018). The present study, therefore, attempts to fill this gap by basing on relevant theories in an attempt to examine the mediating role of self-efficacy in the link between individual and organisational factors and citizenship behaviour.

While self-efficacy has been found to have a consistent direct impact on various outcomes, it was found to act as an intervening factor between antecedents and behavioural variables. For instance, self-efficacy was found to mediate the relationship between empowering leadership and positive behaviour (Kim & Beehr, 2017), personality and innovative work behaviour (Li, Liu, Liu, & Wang, 2017) as well as positivity and in-role and extra-role behaviour (Barbaranelli et al., 2018).

According to Ozyilmaz, Erdogan, and Karaeminogullari (2017), it is important to understand the conditions of self-efficacy to avoid any misleading assumption and how it influences job attitudes and behaviours to avoid overestimating the effect of self-efficacy. Similarly, Kao (2017) also content that self-efficacy is crucial and appropriate when positive characteristics of work can effectively improve the attitude, behaviour and job outcomes. Limited studies have been done on self-efficacy as a predictor of such

behavioural outcome and therefore, there is a need for further empirical studies for an appropriate measurement method (Testa, Corsini, Gusmerotti, & Iraldo, 2018).

Overall, the present study attempts to develop a model and theorise that individual factor (work-FC and family-WC) and organisational factor (supervisory support) and behavioural outcomes (organisational citizenship behaviour) are intervened by individual self-efficacy. This research examines self-efficacy as a relevant mediator following Bandura's (1997) contention that under hindrance of conflict between work and family domain or motivation from supportive supervisor, an individual will be more likely to actively engage in citizenship behaviour. This study intends to explain how individual self-efficacy mediates the relationship between work-FC, family-WC, supervisory support, and OCB.

2.10 Summary of Research Gaps

The literature review identified several gaps in the existing literature. Most of the past studies on work-FC construct are limited to the context of Asian countries (Wattoo, Zhao, & Xi, 2018). Very few studies have compared work-family conflict in a cultural context that is different from non-western countries (Annor & Burchell, 2018). Past research (Allen, French, Dumani, & Shockley, 2015) involved cross-national comparison on the effect of work-FC and found a contrast of collectivism versus individualism between the Eastern and Western countries. In Malaysia, very little study on work-family conflict has been conducted (Ahmad, Nek Kamal, & Aizzat, 2011; Amstad et al., 2011; Jamadin, Mohamad, Syarkawi, & Noordin, 2015; Aizzat & Hsia, 2008), which rendered a difficulty to establish a valid and reliable conclusion on the work-FC study in Malaysia.

Such dearth of information therefore points to the gap between what is being studied and the intention of the present study.

Previous researchers (Yu, Wang, & Huang, 2018) have suggested that work-family conflict could be a potential cause of employees' failing to demonstrate OCB. Previous studies conducted in Asian countries such as China, Indonesia, and Taiwan found that work-family conflict has a significant effect on employees' OCB. In the context of Malaysia, findings from the Malaysian Family Life Survey (MLFS-4) conducted by National Population and Family Development Board (NPFDB) found that Malaysian employees had difficulties in balancing their role at work and home. Nearly half of the respondents (51.9 per cent) had a very limited time to spend with their family; 13.0 per cent have problems with childcare; 11.9 per cent have limited time with themselves; 11.2 per cent find it difficult to manage their workload; and 3.1 per cent tend to have problems focusing on their work. Therefore, it is crucial to examine the influence of work-family conflict on OCB.

Most of previous studies investigated work-FC as a dependent variable. Only a few studies thus far have investigated work-FC as an independent variable towards various behavioural outcomes, such as organisational commitment (Billing et al., 2014; Casper et al., 2011; Li et al., 2013) and work engagement (Opie & Henn, 2013). It can be concluded that most of the studies focus on work-FC as a dependent variable, and only a few studies included work-FC as an independent variable. Lack of studies in this context has failed to provide different understanding in this particular subject. Therefore, there is a clear gap between the past and present study particularly concerning work-FC as an independent variable to OCB.

The gap identified in the literature reviews necessitates a holistic research of the work and family domains. In fact, previous authors have argued that work-family is a distinct construct but appears to be related (Byron, 2005; Beutell & Schneer, 2014). It is shown that employees conflict between the work and family domain is not necessarily unidirectional (Hoobler, Hu, & Wilson, 2010). Previous studies have also encouraged future researchers and practitioners to specify the directionality of the conflict in order to understand the interface between work and family domains (Greenhaus & Beutell, 1985; Whiston & Cinamon, 2015).

According to Sanaz, Khadijah, and Syaqirah (2015) and Haslam, Filus, Morawska, Sanders, and Fletcher (2014), work-FC and family-WC need to be assessed separately because both concepts may have a unique set of consequences. Therefore, it is important to carry out a study on the adoption of bidirectional of work-family conflict namely work-FC and family-WC to identify the different outcomes from both variables.

As for the supervisory support construct, unlike previous studies, this study incorporates supervisory support which is considered to be the most important factor in the work environment (Abdul Karim, Musaed, & Abdullah, 2009). In fact, supervisory support has been shown to have a positive impact on employee's attitudes and behaviour in workplace (Bohle & Alonso, 2016; Wang, 2014). Previous researchers have found that supervisory support resulted in positive attitude, such as commitment in an organisation and encouraging citizenship behaviour in workplace. Although past studies have confirmed the possible relationship that may exist between supervisory support and OCB, research in this linkage is still underdeveloped and therefore the link has yet to be fully comprehended (Paillé et al., 2013; Yadav & Rangnekar, 2015). The present study

attempts to fill those gaps by investigating supervisor support as the independent variable on the relationship with OCB.

Most of the research on this theme has been conducted in the Western countries, and very few studies in the context of Asian countries have utilised self-efficacy as a mediating variable. For instance, it was found that only a few studies were conducted in Taiwan (Chen & Kao, 2011; Kao, 2017), South Korea (Park, Sohn, & Ha, 2016), India (Mahipalan, Sheena, & Muhammed, 2019), and China (Zhou & Liu, 2018). Despite the vast existence of literature on the important role of self-efficacy as a mediator as well as the relation between individual and organisational factor and OCB, the effect of self-efficacy on OCB, particularly in public sector and in Asian countries, still necessitates further research.

Previous studies in the Malaysia context indicates lack of studies on self-efficacy as a mediating variable. Based on the review of the previous literature, it is found that there are no studies have been conducted on individual 's self-efficacy as a mediating effect on the relationship between work-FC, family-WC, and supervisory support and OCB. The literature in the Malaysian context does not indicate any empirical study that examines how self-efficacy contributes to employees' OCB after they perceived conflict in work and family or received support from supervisor.

In summary, in identifying the research gap for self-efficacy and OCB, this study reviewed past literature in relation to factors contributing to OCB. The review uncovered that most of the studies on self-efficacy and OCB were conducted in Asian countries such as Taiwan, China and Iran. Based on the review of literature of previous studies, there is no known study has been done in Malaysian organisation particularly to examine the

relationship between self-efficacy and OCB. Therefore, the present study attempts to fill this gap by conducting a study among Malaysians working in the public sector. Overall, the gaps are presented for all the variables of work-FC, family-WC, supervisory support, self-efficacy, and OCB.

2.11 Research Framework

This study is designed to be an antecedents-outcomes study with OCB acting as the dependent variable. The review of literature identified three antecedents for further investigation in the context of the Malaysian public sector. The three independent variables are work-FC, family-WC, and supervisory support. In addition, a conceptual framework was developed based on the conservation of resource (COR) theory by Hobfoll (1989). Figure 2.1 illustrates the conceptual framework of the present study.

Independent Variable (IV)	Mediating Variable (MV)	Dependent Variable (DV)
Work-FC	Self-efficacy	Organizational Citizenship Behaviour (OCB)
Family-WC		
Supervisory Support		
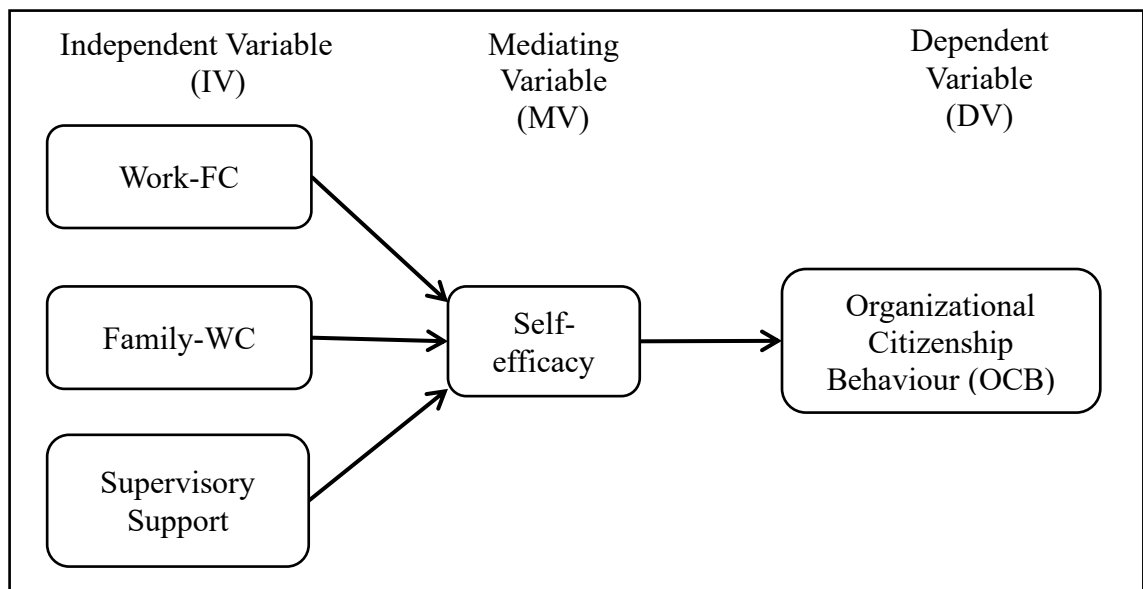
Figure 2.1: Conceptual framework for the study

The conservation of resource (COR) theory is used as a theoretical justification for predicting the relationship between work-FC, family-WC, supervisory support, and self-efficacy with OCB. Work-FC and Family-WC are considered as a threat of potential loss

of resources (Grandey & Cropanzano, 1999; Liu et al., 2015). Work-FC and Family-WC trigger stress because resource is loss in the process of juggling both work and family roles, resulting thus in resource depletion due to the limited resource to draw when dealing with conflict. Due to the resource loss, individual will protect the current resource they have and prevent further resource loss.

In fact, when an individual faces conflict on work and family, employees with low self-efficacy will be more worried about having adequate resources to deal with work and family demand. An individual with high work-family conflict perceives resource depletion and lower their self-belief in managing their work responsibilities and in fulfilling family demand.

Individuals perceive support from supervisors as resource gain. Individuals must invest their resource in order to protect themselves from resource loss, recover from losses, and gain further resources. Therefore, when an individual receives a supportive behaviour from his/her supervisor, he or she would have to invest his/her current resource in order to gain further resources. This outcome will result in resource gain spiral where an individual has to invest resource in order to gain further resource. This is aligned with the principle of the COR theory in resource investment process as mentioned above.

2.12 Development of Hypotheses

Hypotheses provide clarity, specificity, and focus to a research relationships in a conceptual model (Kumar, 2011). According to Babin and Zikmund (2016), hypotheses consist of two types namely descriptive and causal. A descriptive hypothesis refers to a simple answer to a specific research problem while a causal hypothesis refers to the theoretical statements about the relationships between variables. The following section explains the hypothesis in regard to each of the relationships in the research framework.

2.12.1 The Relationship between Work-FC and Organisational Citizenship Behaviour

The relationship between work-FC and OCB has been examined by researchers and is established in the literature. There is a growing body of research suggesting a relation between work-FC and OCB (Wang, Lee, & Wu, 2017). For instance, in an earlier study conducted by Bragger et al. (2005) on the relationship between work-FC and OCB among 203 teachers in the United States, a negative significant relationship was found. The study concluded that the more an individual feels any conflict regardless in any direction, the less will he/she engage in OCB activity.

In the same year, Bolino and Turnley (2005) conducted a study on university alumni in the United States and found that individual initiative (a specific type of OCB) was found to have a positive significant relationship with work-FC. The relevance of this result is that an individual may experience more conflict between work and family due to the high levels of individual initiative to engage in organisational activities.

Later, Klein (2007) conducted a similar study to investigate the effect of work-FC on both OCB-Individual and OCB-Organisation among university alumni. Surprisingly, the study found that work-FC does not have any relationship with OCBI and OCBO. This can reflect on the specific behaviour of individual initiative factor such as behaviours that hinder their work-life balance. In another study, Jones (2009) attested that there is no relationship between OCB and the dimensions of work-FC, such as strain-based conflict and time-based conflict. It was also found that certain dimensions of OCB could have an effect on the experience of strain-based and time-based of work-family conflict.

In a meta-analyses study conducted by Amstad, Meier, Fasel, Elfering, and Semmer (2011), OCB was found to have a stronger relationship with work-FC. According to Amsted and colleagues, based on the review conducted on the past literature from various contexts, OCB was found to have the strongest relationship with work-FC. In a similar year, an empirical study conducted by Beham (2011) on 286 employees in Spain proved a negative relationship between work-FC and OCB. The researcher concluded that due to the lack of flexibility of work arrangements in an organisation, the employees will reduce their extra efforts at work in order to cope with the pressure to fulfil the responsibilities in both domains.

In a different context, Lambert, Kelley, and Hogan (2013) conducted a research among 160 correctional staff and found that work-FC had a negative significant relationship with OCB. In particular, a strain-based conflict as one of the dimensions of work-FC had a negative relationship with OCB. The study indicated that employees who perceived conflict may blame their jobs and become less concerned to perform altruistically and demonstrate compliance behaviour towards others.

On the other hand, Fathuma (2013) conducted a study in Sri Lanka and found a positive relationship between OCB and work-FC. The reasons were that when the employees engage in OCB, they were required to spend their time and energy, which resulted in a lack of available resources for their family responsibilities. Additionally, Tziner and Sharoni (2014) investigated the influence of OCB on work-FC among 120 Arabian employees. The research model encompasses a link concerning the effect of citizenship behaviour towards a conflict between work and family in an organisation. The outcome proved that the work-FC variable is considerably negative influenced by employees' OCB's in a non-western context.

Later, researchers Jane and Kristiana (2014) and Bighami, Khalifesoltani, Abdi, and Aliakbar (2014) investigated a possible link that conflict in work and family might influence OCB among nurses in health institutions. Their results showed that work-FC had a significant negative relationship with OCB. In the following years, Cloninger, Selvarajan, Singh, and Huang (2015) analysed the influence of work-FC upon employees citizenship behaviour in various organisations in the United States. The authors found that work-FC was negatively significant to OCB.

In another study, Wang et al., (2017) discovered that work-FC had a negative significant relationship with OCB. However, the result contradicts Aurangzeb, Asrar, Ilyas, and Bhutto, (2017) who found that work-FC has a positive significant relationship with the OCB of 82 employees in Pakistan. Recently, Yu et al. (2018) conducted a study on the link between work-FC and the OCB of the employees of Fortune 500 company in China. Yu et Al. found that the relationship is negatively significant. Drawing upon the conservation of resource theory (Hobfoll, 1989), the study findings conclude that

reduction in citizenship behaviour allowed an individual to conserve limited resources which depleted due to the perceived conflict between work and family demands.

The COR theory serves as a theoretical basis to explain the relationship between work-FC and OCB. As the theory suggests, employees are required to spend more resources in order to cope with increased workloads and fulfil family responsibilities. However, the resources available are limited, thus resulting in a dearth of resources, which makes it difficult for the employees 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 their performance in OCB in order to conserve personal resources and to avoid continuous resource loss.

On the other hand, work-FC occurs when work demand interferes with family responsibilities when employees are outside from the workplace. Work-related task interference results in conflict when individual's trying to manage their resources to fulfil family demand. Although individual's having conflict due to the work-related resource has been invested to fulfil family demand, this gives an opportunity for the individual to actively engage in citizenship behaviour since there are available resource to invest for future gain. Subsequent to the inconclusive empirical findings documented in the literature, the following hypothesis is proposed:

Hypothesis 1a: There is no significant relationship between work-FC and organisational citizenship behaviour

2.12.2 The Relationship between Family-WC and Organisational Citizenship Behaviour

Several empirical studies were found to have examined the relationship between family-work conflict and OCB. In a study conducted by Bragger et al. (2005) among teachers in the US, the authors found that family-WC was negatively related to OCB. The study concluded that individuals would feel more conflict between the role at work and at home regardless of which is interfere more with the other, the less individual will engage in OCB. The result also indicated that parents had a greater work-family conflict than nonparents, who also has family-related demand but not directly interfere with their work responsibilities.

In another study by Beham (2011), the author distinguished work-FC into two bidirectional constructs (Work-family conflict and Family-work conflict) towards the directional of OCB named as OCB-individual, OCB-organisation and OCB-Task (Coleman & Borman, 2000; William & Anderson, 1991). The result found a significant negative relationship between family-work conflict and OCB-Individual and OCB-Task. The study also looked at gender differences and found that the negative influence of family-WC on the behavioural outcomes was stronger for women compared to men. Hence, Beham (2011) reasoned that employees who experienced family-WC were unable to invest personal resources since both OCB-Individual and OCB-Task required such active behaviour and extra time commitment.

Hence, an individual with a high level of family-WC would feel obliged to maintain in-role performance at high levels because it is part of the organisation performance evaluation (Beham, 2011). In order to maintain such performance, an individual would

feel motivated to conserve personal resources and may decide not to go beyond extra which results reduce their engagement in OCB activities (Hobfoll, 2001).

In another study, Cloninger et al. (2015) adopted the dimensions of family-WC (work-interference family and family-interference work) and reported a significant relationship between family-WC and OCB. The authors proposed that employee's family-interference work spills over towards conflict in the work domain, thus resulting in lack of resources and further declines work-related behaviours such as OCB (Cloninger et al., 2015). Subsequently, O 'loughlin, (2016) study found a negative relationship between family-WC and OCB among full time employees who are working in the private sectors in the United States.

Recently, Wang et al. (2017) examined both types of work-FC and family-WC as conceptualised by Mesmer-Magnus and Viswesvaran (2005) on the effect towards OCB. The study found that family-WC had a negative effect on the employee's citizenship behaviour. In a more recent study, Xia, Zhong, Wang, and Tiong (2018) investigated the effect of family-WC and project citizenship behaviour among 154 project managers in China. The study found that family-WC is negatively significant with helping behaviour (altruism). The researchers suggested that the employees tried to minimise resource loss caused by conflict between family and work by decreasing their involvement and commitment towards citizenship behaviour.

The COR theory suggests that an individual may have limited resource in fulfilling work demand that has been invested for family responsibilities and thus are unable to engage in OCB to preserve the balanced resource. When an individual has to invest their available resource to fulfil family responsibilities at the workplace, his/her resources will

be depleted and his/her personal accomplishment will be diminished (Halbesleben et al., 2009). The employee will then be motivated to minimise further loss of resource by reducing investment in resource-depleting activities (as suggested by Hobfoll, 1989; Xanthopoulou et al., 2007). Based on the review of past literature, it can be hypothesised that:

Hypothesis 2a: There is no significant relationship between family-WC and organisational citizenship behaviour.

2.12.3 The Relationship between Supervisory Support and Organisational Citizenship Behaviour

In the relationship between supervisory support and OCB, psychology and instrumental support from a supervisor is crucial in providing resources to employees (Hammer et al., 2013). A supervisor is considered as the main source of influence on the work environment since he/she is the one who provides social, emotional or material support and resources (Lloyd, Boer, Keller, & Voelpel, 2015). When a supervisor shows a supportive behaviour towards his/her employees in work or non-work life, the subordinates will show a high level of identification, compliance, and gratitude, which increases their OCB (Wu, Lee, Hu, & Yang, 2014).

As propounded by the COR theory, supervisory support is a job resource that is considered as an important determinant of motivational states, including OCB (Bakker & Demerouti, 2007). Having resources in the areas of individuals goals would motivate and elate an individual (Demerouti, Bakker, & Gevers, 2015). When individuals perceive resource (support) from their supervisor, they will feel cared for and appreciated by their

organisation. When they possess resource, they are capable of gaining more resource because of the resource "gain spiral," and they will be likely to invest their available resource thus engaging in citizenship behaviour, in order to gain further resource (Hobfoll, 2001). Consistent with the COR theory, employees may need supervisory support in the form of resources, which would empower them to better participate in OCB (Yadav & Rangnekar, 2015).

Ladebo (2008) reported that perceived supervisory support has a significant relationship with organisational citizenship behaviour among extension personnel in agricultural organisations. Hence, in a study conducted among nurses, Chen, Wang, Chang, and Hu (2008) concluded that supervisor support had a significant and positive effect on OCB. By studying the employees of electronic companies and bank institutions, Chen and Chiu (2008) examined the correlation between supervisor support and person-organisation fit, job satisfaction, job tension, and organisational citizenship behaviour. Their findings revealed that supervisor support significantly correlates with OCB.

Furthermore, Wang, Hinrichs, Prieto, and Howell (2013) conducted a study in manufacturing companies comparing between US and China between perceived supervisor support and organisational citizenship behaviour. The study reported a significant effect of perceived supervisor support on OCB. In the same year, Rubin (2013) conducted a study on 389 employees and found a moderate relationship between perceived supervisor support and altruism and courtesy (dimensions of OCB).

In the following year, Wang (2014) conducted on 238 employees in China confirmed that supervisor support has a positive significant relationship with OCB . The study, which employed the social exchange theory, suggests that support from the

supervisor can increase employee's good impression towards the organisation thus leading employees to reciprocate by performing positive attitude and behaviour such as extra-role behaviour that contributes to the organisation success.

Later, Randhawa and Kaur (2015) as well as Yadav and Rangnekar (2015) conducted a study to investigate the effect of supervisory support in India settings. The study found that supervisory support has a positive influence on employee's citizenship behaviour. It is also suggested that a supportive supervisor makes employees become more confident in decision making and performing job duties as well as give a good impression of the organisation.

Similarly, Tremblay and Gibson (2016) also found that perceived supervisory support had a positive relationship with OCB among employees in nine small organisations. In the same year, Raineri and Paillé (2016) found a positive relationship between supervisory support and environmental citizenship behaviour, which is considered as part of the OCB domain. Tang and Tsaur, (2016) conducted a study on 700 frontline employees in Taiwan and found that a supervisor support climate has a positive effect on service-oriented OCB.

Recently, Pasamehmetoglu, Guchait, Tracey, Cunningham, and Lei (2017) examined the relationship between supervisory support and helping behaviour among restaurant employees. The study found that support from supervisory had a significant influence on the employees' helping behaviour (altruism) as one of the dimensions in OCB concept. Priyankara, Luo, Saeed, Nubuor, and Jayasuriya (2018) investigated the role of leader's support for environment towards OCB for environment and found a positive effect between the relationship. Likewise, Dai, Hou, Chen, and Zhuang, (2018)

also found that increased support from supervisor can increase citizenship behaviour among the employees working in hotel industry.

Most of the previous studies concerning the link between supervisory support and OCB has shown a positive relationship. This study offers the following null hypothesis to investigate the effect of support towards individual behaviour in the public sector context. Therefore, it was hypothesised that

Hypothesis 3a: There is no significant relationship between supervisor support and organisational citizenship behaviour

2.12.4 The Relationship between Self-efficacy and Organisational Citizenship Behaviour

Over the last few decades, several researchers have attempted to explain the relationship between self-efficacy and OCB. Hence, there is a growing body of studies suggesting a relation between individual-factor such as self-efficacy with OCB. Bogler and Somech (2004) conducted a study on self-efficacy and OCB among teachers and found a significant relationship between the two constructs in the context of educational setting. This study concluded that when the teachers reported higher level of self-efficacy, they had high expectations that they can make a difference, so they were willing to function beyond their formal responsibilities and become more committed to their profession.

The discovery above was also corroborated by Walumbwa, Hartnell, and Oke (2010) in their study among 815 employees in Kenya. The study found that self-efficacy

positively and significantly influenced the employees' OCB. The researchers considered self-efficacy as a complementary yet salient attitude in the service organisation. In a similar year, Pieter (2010) examined the role of self-efficacy with OCB among 125 employees and found that increase in self-confidence influenced the way the employees think and how they motivate themselves towards adopting such attitude and behaviour.

Broadly in line with the findings above, Chen and Kao (2011) study on a police officer in Taiwan also found a significant relationship between self-efficacy and OCB. The study states that with the presence of active citizenship behaviour among employees, a positive efficacious could benefit an organisation by improving its efficiency and productivity. It is suggested that employers should focus on improving their work environment and provide the necessary knowledge, skills and capacity required by the employees for their tasks.

In a study of local government in the United Kingdom's public sector, Beauregard (2012) found similar findings. The study suggests that in order to increase self-efficacy, an organisation through its manager should instil with the individual the belief to excel and be competent to successfully perform the task while engage in citizenship behaviour. The study also considered gender differences in analysing the linkages and found that the effect of self-efficacy on citizenship behaviour was significant only for men but not for women. The study concludes that women are more inclined to perform citizenship behaviour regardless of their evaluation towards own competence to perform a task.

Research on individual factors such as self-efficacy has provided significant perspectives at the individual and organisational level. In one study, Hu, and Liden's (2013) study on employees in the private sector in China found that self-efficacy provided

significant relationship thus explaining 36% in an OCB construct. The study proposed that individuals who have high confidence in their own capabilities are likely to perform beyond their formal job requirement. These individuals believe that they are able to help colleagues and become more optimistic about their future (Bandura, 1986; Hu & Liden, 2013; Smith et al., 1983).

Later, Cohen and Mohamed (2015) investigated the relationship of self-efficacy and OCB among Arab teachers in an elementary school located in Israel. The study found a significant positive relationship between self-efficacy and OCB. The study also noted that self-efficacy influences an individual's appraisal towards a given situation, which in turn, affects their decisions and behaviour at work (D'Amato & Zijlstra, 2008).

Hence, Khodabandeh and Ardabili (2015) conducted a study on occupational self-efficacy and citizenship behaviour among employees in a gas company in Iran. The result of path analysis found that self-efficacy has a positive significant relationship with OCB. According to Bandura (1997), self-efficacy has a significant effect on the employee's task to-do, the efforts to bear these tasks, the determination and response to setbacks and the changes of behaviours. Employees would demonstrate social encouragement, thus resulting in higher levels of self-efficacy and increased level of OCB. Reizer and Hetsroni (2015) found a similar result among the employees in customer service settings.

A study conducted by Kao (2017) on public sector employees in Taiwan found that self-efficacy has a significant relationship with one of the types of service-oriented OCB. This study was conducted with the inclusion of a cross-level analysis from organisation and individual levels. The findings suggest that it is necessary to stimulate employees'

self-efficacy by motivational characteristics of work design to encourage employees OCB.

In 2018, researchers Ozyilmaz, Erdogan, and Karaeminogullari (2018) examined the role of self-efficacy and OCB among 300 employees in a manufacturing sector. The study found that self-efficacy as motivational construct plays a significant importance in improving employees' attitude, behaviour, and performance. In another recent study, Zubair et al. (2019) conducted a study between knowledge sharing, self-efficacy, and OCB in pharmaceutical companies and found that self-efficacy positively influences employees' OCB.

In another study, Adewale and Ghavifekr (2019) investigated the relationship between leaders' self-efficacy and staff OCB who are working in higher education institution. The results found that leaders' self-efficacy positively influences staff OCB through motivation and encouragement of positive attitude. In another study conducted by Ajat et al. (2019) among teachers, self-efficacy was found to have a positive direct relationship with OCB. The study concludes that individuals who focus on the positive aspect of themselves, the work, and people around him will have a positive effect. It is also suggested that self-efficacy needs to be improved by increasing one's belief and by encouraging active involvement in order to better understand the employees' ability to accomplish their tasks and responsibilities. However, little research has been done to investigate the effect of self-efficacy on OCB particularly in the public sector.

In line with the COR theory, self-efficacy is a personal resource (Bandura, 1997) that might influence positive working environment, which would result in individuals feeling optimistic and believing that they are capable of achieving their work goals, thus

enhancing their work engagement (Xanthopoulou et al., 2007). This notion is aligned with the resource caravan paradigm (Halbesleben et al., 2014), which proposes that self-efficacy is likely to be associated with optimism and the ability to cope with demanding contexts (Hobfoll, 2001). Self-efficacy of an individual improves participation in volunteering tasks that are not required by their job description (Beauregard, 2012). Specifically, when an individual having high self-efficacy, they will have high self-confidence in managing and completing the tasks in hand, this will encourage them to participate voluntarily in extra-role behaviour such as OCB. Therefore, the present study proposes the following hypothesis:

Hypothesis 4:   There is no significant relationship between self-efficacy and organisational citizenship behaviour

2.12.5 The Relationship between Work-FC and Self-efficacy

Self-efficacy is illustrated as an individual's belief in one's ability to perform a task (Cinamon, 2010). According to Bandura (1989), self-efficacy is a central belief of an individual on the perceptions of abilities to deal with various situations and to execute coping strategies. Hence, self-efficacious beliefs would assist a person to face barriers and conflicts by initiating specific behaviours, persistence, and emotional reactions (Bandura, 1986).

In 2001, Erdwins, Buffardi, Casper, and O'Brien (2001) conducted an empirical research that investigated the effect of work-FC on employees' self-efficacy among employed women. The result showed a negative correlation between work-FC and OCB. This implies that increased in work-FC leads to less OCB engagement from employees.

Hence, Erdwins and his colleagues concluded that individuals with greater self-efficacy would feel much more competent and effective in performing and managing multiple roles, which results in lower work-FC.

Cinamon's (2006) study among Israeli Arab found that work-FC was negatively influenced by the employee's self-efficacy. The study reported that a lower level of work-FC may contribute to the establishment of increase in self-efficacy. The study also suggests implementing a career development programme that aims to improve adolescent's self-efficacy regarding the ability to manage work-FC. These findings were also supported by a similar study from Cinamon, Weisel, and Tzuk (2007) who found that married individuals with a higher level of work-FC significantly lowered their parental self-efficacy. The study indicates that when one's spouse experiences higher work-FC, which demands great investment of time and effort, the individual may feel less efficient and may experience negative interactions with their children.

Later, Mathis and Brown (2008) studied the effect of work-FC on self-efficacy and found a negative influence between those relationship. This finding suggests that individuals with high self-efficacy believes that they can handle any task in hand, which may reduce the impact on the conflict between work and family. In another study, Cinamon (2010) conducted a study on the relation between work-FC and self-efficacy among university students in Israel. This study also concluded a similar standpoint whereas those individuals who attribute the highest efficacy to manage both conflicts will be expecting a lower level of conflict and vice versa.

Likewise, Houle, Chiocchio, Favreau, and Villeneuve (2012) conducted a study among 414 employees in financial institution and reported a significant and negative

impact of self-efficacy on work-FC. It was also noted that self-efficacy was the strongest predictor with high variance in work-FC. Previous research has predominantly focused on personal dispositions and personal trait but little was known about the effect of cognitive variable such as efficacy belief.

On the other hand, Byrd-Poller (2013) found that role conflict (one of the types of work-FC) does not directly influence self-efficacy. The finding indicated no significant relationship between role conflict and self-efficacy. Hence, the study implied that the multiple roles that enact conflict are not related to the feeling of confidence and belief (Byrd-Poller, 2013). However, in contrast, Tang and Chang (2010) reported a negative relationship between role conflict and self-efficacy among 202 employees in manufacturing companies. Similarly, in a more recent study among nurses and patient in hospital, Abdul Rahman, Najmi, Ariyanti, and Ratnawati (2017) also found that role conflict is negatively influence self-efficacy.

Smoktunowicz, Cieslak, and Demerouti (2017) analysed the influence of employee's work-FC in various occupation and found that the factor can have negative influence on their efficacy belief. This association stemmed from the social cognitive theory (Bandura, 1986) which proposes that conflict may trigger self-belief of being capable of managing the conflicting demands between work and family. Accordingly, Smoktunowicz et al. (2017) suggests that enhancing personal resources of self-efficacy, which is modifiable, could prevent negative consequences of conflict.

In line with the COR theory, the conflict between work and family may trigger the depletion of personal resource, including self-efficacy. Work-FC leads to stress because resources are lost in the process of juggling between work and family roles (Grandey &

Cropanzano, 1999). Hence, individuals who perceive conflict may believe that they are unable to successfully perform a job, thus resulting in the feeling of negative state, e.g., dissatisfaction, depression, anxiety, and physical tension. According to Glaser and Hecht (2013), a conflict is more threatening when a person lacks confidence and worries about having adequate resources to deal with role demands. As a result, they will become anxious and on how others will perceive individual's inability to cope with the stressful situation. This study expects that self-efficacy are lower when conflict between work and family intensify. From the above review on the relationship between work-FC and self-efficacy, the following hypothesis is proposed:

Hypothesis 1b: There is no significant relationship between work-FC and self-efficacy.

2.12.6 The Relationship between Family-WC and Self-efficacy

As the COR theory proposes, when an individual perceives conflict in work role due to interference of family responsibilities, the resource available for them to perform work task would be depleted. When the individual fails to have adequate resource to fulfil work demand, he or she may be unable to deal with the various demands of family responsibilities. If individuals' resources are lost or threatened, they would experience distress and decrease their self-belief. In the process of juggling both work and family roles, their time and energy resources, among others, would decline, leading to exhaustion and restlessness. As a result, they would experience less confidence in managing the resources when the demands are too high. These individuals, as suggested by the COR theory, would protect and conserve available resources and experience the need to recover from resource loss (Hobfoll, 2001).

A lack of research attention has been given to self-efficacy in work-family research (Glaser & Hecht, 2013; Hennessy & Lent, 2008). One previous study has shown a negative relationship between self-efficacy and family-work conflict. In a study conducted by Houle et al. (2012), the result found that greater self-efficacy is linked to a lower level of family-work conflict among employees. The study concluded that a sense of efficacy in one's individual could reduce the level of conflict in family and work domains.

Individuals with family-WC have to spend their time and energy fulfilling their family demands while at the same time having fewer resources to perform work demand. As a result, the inadequate resources available to accomplish work responsibilities affect their personal confidence. Earlier study conducted by Cinamon (2006) concerned the bidirectional approaches of Work-FC and Family-WC with self-efficacy among 358 unmarried students in Israel. This study found that family-WC had negative influence towards the students' self-efficacy. The finding suggest that the respondents were aware of the multidimensional of role combination and the importance to enhance self-efficacy in order to be able to handle the interferences.

In another study, Cinamon (2010) examine the effect of self-efficacy towards anticipated work-family conflict among young adults. The study found that self-efficacy had a negative correlation with both directional of conflict (work-FC and Family-WC). The study suggests that individual who attributed high importance to both roles for highest self-efficacy to manage both roles expected low levels of conflict, and those who attributed low importance of self-efficacy to both roles expected to have higher conflict.

In another study by Wang, Lawler, and Shi (2010), they found that family-WC had a significant negative relationship with self-efficacy. The authors suggest that individuals with a strong belief to perform a work-related task may perceive less conflict in family interference with their work responsibilities. Therefore, this current study attempts to investigate the relationship between family-WC and self-efficacy to facilitate better understanding of the effect of conflict in family and work towards individual self-belief.

A conflict between family and work have shown to have significant influence on individual self-efficacy. The available resources are limited to meet work responsibilities results in affecting individual capabilities in completing the work task. For instance, individual with family-WC expands resources in fulfilling family duties in results with fewer resources to meet work demand (Grandey & Cropanzano, 1999; Hobfoll, 1989, 2001; Peng Wang et al., 2010). In a study conducted by Chelariu and Stump (2011) among salesperson, it was found that self-efficacious individuals believed that they possess resources that can assist them to cope with family side impacts on the work domain.

In fact, family and work demands and expectation are still not fulfilling although an individual possesses high self-efficacy. However, high efficacious individuals may be capable of controlling their low level of family-WC (Hao, Wu, Liu, Li, & Wu, 2015). This statement however contradicts that of the previous study which mentioned that self-efficacy did not have an influence on family-WC and depressive symptoms. For instance, a study conducted by Hao and colleagues in 2015 among nurses suggested that self-efficacy does not have an influence on family-WC. Hence, an individual with lower family-WC could easily be controlled with a high self-efficacious individual. However,

an individual with high self-efficacy will feel disappointed when high family-WC becomes less controllable. Therefore, the following hypothesis is offered:

Hypothesis 2b: There is no significant relationship between family-WC and self-efficacy.

2.12.7 The Relationship between Supervisory Support and Self-efficacy

Supervisory support is considered as a job resource that involves emotional concern, instrumental aid, information or appraisal from a supervisor towards his or her subordinate (Carlson & Perrewe, 1999). In the COR theory, self-efficacy is a personal resource deriving from the social cognitive theory. According to the related corollary, when an individual has greater resources, he or she becomes more capable of gaining resources while being less vulnerable to resource loss (Hobfoll, 2001). Receiving resources in terms of supervisory support will contribute to an individuals' personal resource such as self-confidence. Given these points, the existence of both supervisory support as a job resource and self-efficacy as a personal resource is important because both factors contribute to the resource caravans in the COR theory.

Past research findings have been proved supervisory support as an important influenced on employee's self-efficacy based on the previous empirical study. For instance, in an earlier study by Gibson, Grey, and Hastings (2009), Polizzi (2009) and Karatepe and Olugbade (2009), supervisory support was found to have a significant influence on employees' self-efficacy. Support from supervisors' activates employee's self-efficacy belief and giving them an opportunity to manage their work environment.

Another study conducted by Chen and Scannapieco (2010) found that supervisory support has a significant relationship with self-efficacy. The finding suggests that supervisors are capable of improving those who have low self-efficacy. The study conclude that supervisor's support is an important determinant to employee's self-efficacy. Employees with low self-efficacy will not choose to stay in an organisation. Therefore, sufficient supervisory support plays a significant role in providing guidance and encouraging employees to acquire the necessary skills.

Then, Houle et al. (2012) conducted a study on the influence of supervisor's instrumental and emotional support with self-efficacy among employees in financial institution. The results found that self-efficacy has a positive influence on supervisor's support. The study indicates that employees may not take advantage from the perceived support and take concrete action to limit the disturbance of professional responsibilities from family demands.

In addition, Nisula (2015) conducted a study on supervisory support and self-efficacy from the data of 593 municipal organisation in Finland. The result of the analysis found that supervisory support can empower by motivating and encouraging employees to perform challenging tasks. The study also concludes that self-efficacy fully mediates the relationship between supervisory support and behavioural outcome.

Consequently, Ahmed, Umrani, Pahi, and Shah (2017) investigates the effect of supervisory support on psychological capital and the role of mediation of psychological capital between the relationship of supervisory support and engagement among students at public university in Malaysia. One of the factors of psychological capital is self-efficacy, which outlines the confidence of individuals on their abilities to strive for better

outcome (Luthans, Avolio, Avey, & Norman, 2007). Based on the analysis result, the study found that supervisory support was positively significant; it represents 51 per cent of self-efficacy in the relationship with psychological capital. The study concludes that supervisor support is crucial in boosting psychological capabilities for enhanced behaviours.

One recent study by Hidayah, Suan, and Karatepe (2019) was conducted among employees in in call centre organisation in Malaysia. The findings confirmed that supervisor support has a positive influence on employees' self-efficacy. By using the structural equation modelling approach, the study concluded that a supervisor should have a good relationship with his/her employees in order to assist them in managing difficulties successfully. The results are in line with the social exchange theory which views that the sufficient support from supervisor perceived by employees makes them feel efficacious and willing to reciprocate by increasing their work engagement. Accordingly, this study proposes the following hypotheses:

Hypothesis 3b: There is no significant relationship between supervisory support and self-efficacy.

2.12.8 Self-efficacy Mediates the Relationship between Work-FC and Organisational Citizenship Behaviour

The hypothesis was developed based on the past literature review which denotes that self-efficacy can be a possible mediator of inter-role conflict and the outcome. For instance, based on the work-home resource (W-HR) model introduced by Brummelhuis

and Bakker (2012), self-efficacy as a personal resources mediates the relationship between the contextual demands and outcomes.

Brummelhuis and Bakker (2012) also defined work-home conflict as a process whereby contextual demands in one domain drain personal resources, resulting insufficient personal resources to function successfully in another domain. Examples of contextual demands include working overtime, conflict at home, disappointments, care for young children, and lots of household chores (Brummelhuis & Bakker, 2012). Figure 2.2 illustrates the work-home resource model.
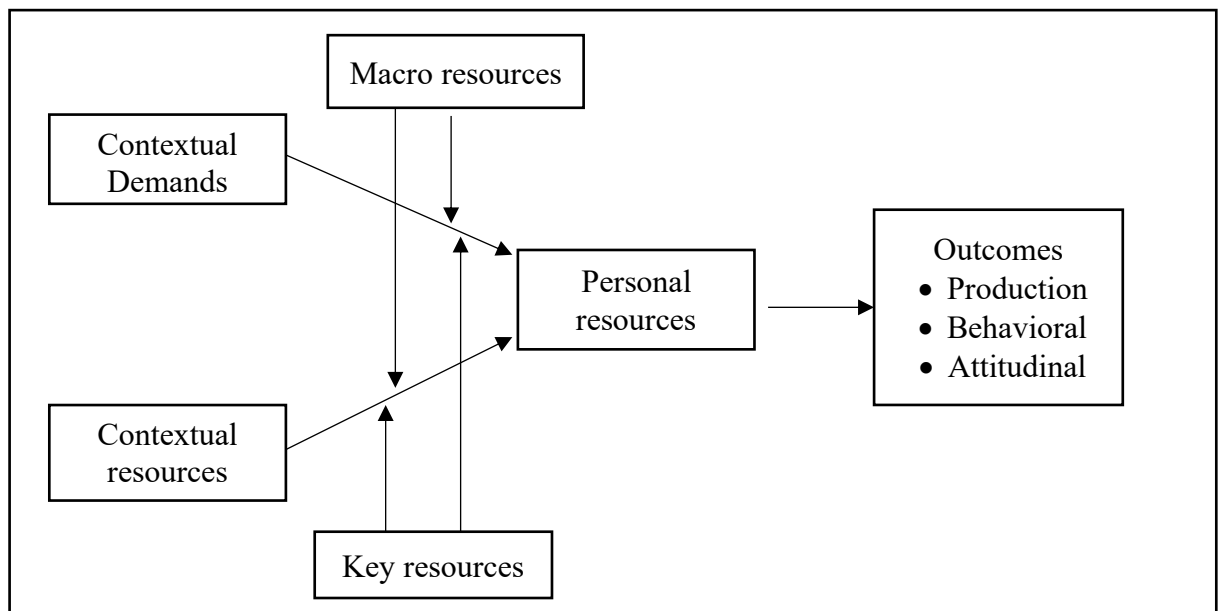
Figure 2.2: Work-Home resources model by Brummelhuis and Bakker (2012)

Based on the Work-Home Resource model, self-efficacy as personal resources may reduce conflict between work and family because individuals initiate and sustain effort to cope with the demands from both domains. One study has confirmed that enhancing self-efficacy reduces the stress generated from the conflict between work and family (Glaser & Hecht, 2013). However, little has been examined on the mediating role of self-efficacy in the work-family interface (Smoktunowicz et al., 2017).

In the work family literature, high level of self-efficacy has been associated with reduced conflict between work and family, improved organisational commitment, and higher level of work performance (Cherian & Jacob, 2013; Houle et al., 2012). However, most of the studies on the mediating role of self-efficacy are mostly on the attitudinal outcome, such as job satisfaction and well-being. For instance, in one previous study in academic institution, self-efficacy was identified as a mediating factor in the relationship between work-family conflict and individual-related outcome, such as well-being and job satisfaction (Houle, Chiocchio, Favreau, & Villeneuve, 2009; Mathis & Brown, 2008; Peng Wang et al., 2010).

As suggested by the COR theory, a perceiving conflict that arises from the need to juggle between work and family roles would result in an individuals' resource depletion, thus impacting their confidence in managing available resource. When their resources are lost, they would become vulnerable to future losses, and they would require to invest on other resources in order to protect available resources (Nohe et al., 2014).

The COR theory also predicts that employees who perceive continuous resource loss (1) are likely to experience an uncomfortable situation and (2) will try to minimise losses by decreasing their efforts, which in turn, may result in poor engagement in citizenship behaviour. Individuals facing high work-FC are likely to invest their remaining resources in less resource consumptive behaviour due to lack of work resources. However, self-efficacy can prevent the harmful impact of job demands and the interference of work with family (Demerouti, Bakker, & Bulters, 2004). Individuals who possess high self-efficacy might be more capable of selecting, altering, and implementing their other resources to meet stressful demands (Hobfoll, 2002). Lack of personal resource

might influence individuals to protect available resource and to attempt avoid engaging in citizenship behaviour.

Despite the recommendations made in previous studies, only a few researchers have studied the linkages similar to that of the current study. The lack of findings and conclusion in the operationalisation of constructs used in previous studies has prevented a more in-depth understanding of the cause-effect relationship. Therefore, the mediating variable such as self-efficacy is incorporated in this study to demonstrate the causal effects thus promoting a more comprehensive and meaningful study. The following hypothesis is therefore proposed:

Hypothesis 1c: Self-efficacy mediates the relationship between work-FC and organizational citizenship behaviour.

2.12.9 Self-efficacy Mediates the Relationship between Family-WC and Organisational Citizenship Behaviour

Previously, various types of personal resources have been found to mediate the relationship between work-FC and family-WC and their outcome. For example, Houle et al. (2009) found that self-efficacy mediated the relationship between role conflict (other terms of work-FC and family-WC) and individual-related outcome (wellbeing). The study found that self-efficacy plays a significant role in individuals' confidence and the ability to manage multiple and incompatible demands between work and family.

In fact, individuals with strong sense of efficacy believe they are equipped with the necessary skills to cope with these demands, thus resulting in less stress, with a greater

perseverance to face challenges and use time and energy effectively (Bandura, 1997; Chan et al., 2015; Reizer & Hetsroni, 2015). Likewise, in another study, Tang and Chang (2010) conducted a study on 202 Taiwanese employees and found that self-efficacy mediated the relationship between conflict in role and individual-related outcome (creativity).

In a study conducted by Smoktunowicz and Cieślak (2017) on employees in professional research company, self-efficacy was found to mediate the relationship between work-family conflict and family-work conflict towards perceived stress. The authors concluded that high demand at home was associated with higher family-work related perceived stress resulting in decreased self-efficacy results in perceived of stress among employees.

The role of self-efficacy as a mediator response is explained in the work-home resource model (W-HR) by Brummelhuis and Bakker (2012), which proposes that contextual demand such as family-work conflict affects the outcomes through the depletion of personal resources. Hence, in line with self-efficacy belief model's, stressful situations and emotional burden as a result from perceived conflict in family and work influence individuals physiological states affect on belief of personal efficacy (Bandura, 1986, 1997).

According to the principle of the COR theory, resource loss is more salient than resource gain (Hobfoll, 1989). The perception of conflict in work due to family responsibilities interference may result in the strain and draining of available resource. When individuals perceive conflict, their resource will be depleted, and the outcome would be their reducing of effort to improve job-related performance (Grandey &

Cropanzano, 1999). Individuals would withdraw their effort from helping others as a way to conserve their resources (Hobfoll, 1989). This study therefore suggests, based on the COR theory, that employees who face high family-WC are less likely to engage in OCB due to a lack of available resources due to the growing issues of family-work conflict.

Based on the previous literature, family-WC has been found to have a negative significant relationship with self-efficacy. At the same time, self-efficacy has been shown to have a positive relationship with employees citizenship behaviour (Beauregard, 2012; Cohen & Mohamed Abedallah, 2015; Hu & Liden, 2013). It can be concluded therefore that self-efficacy plays a significant role as a mediator in the relationship between family-WC and OCB. Therefore, this study attempts to examine the mediating effect of self-efficacy on the relationship between family-WC and OCB. Hence, the following hypothesis is proposed:

Hypothesis 2c: Self-efficacy mediates the relationship between family-WC and organisational citizenship behaviour.

2.12.10 Self-efficacy Mediates the Relationship between Supervisory Support and Organisational Citizenship Behaviour

Some of the previous studies have demonstrated the mediating role of employee's self-efficacy on the behaviour outcome variable. It is argued that individuals with perceived self-efficacy would influence their course of action, the effort they need to invest, and the challenges and goals they want to achieve (Bandura, 2006). A self-efficacy belief focuses on the cognitive belief of individual that is influenced by the

following four types of experiences: mastery experience, vicarious experience, verbal persuasion, and physiological states (Bandura, 1982; Zimmerman, 2000).

Specifically, mastery experience helps an individual to gain a sense of capability by achieving success through sustained effort. Personal attainment will help an individual to manage their weaknesses and failures easily and gain confidence as a result of reaching the goal (Chelariu & Stump, 2011). A vicarious experience gained through direct observation or information concerns how well others perform in a situation (Mathieu & Taylor, 2006).

On the other hand, verbal persuasion in the model assists in strengthening individuals belief that they possess for the capabilities to achieve the expectations (Bandura, 1997). For instance, evaluative feedback was given to the individuals on their performance to enhance efficacy belief. Bandura (1997) described physiological states as conveying somatic information that involve physical accomplishment, health functioning, and coping with stressors. Therefore, individual's efficacy belief can be improved by enhancing physical status, reducing stress level and negative emotions, as well as improving positive moods.

Furthermore, the mediating role of self-efficacy specifically stems from the same self-efficacy belief model (Bandura, 1986), which positions supervisory support as verbal persuasion that may influence individual self-efficacy, and which in turn, may transmit the effects on behavioural outcome. According to Cherian and Jacob (2013), self-efficacy is shown to contribute to the changing and affecting individual behaviour.

According to Bandura (2006), perceived self-efficacy can have an effect on individual's motivation, thought process, performance level, emotional states, and environmental conditions. Individuals with self-efficacy predicts personal initiative and "taking charge" behaviour at workplace and engage in citizenship behaviour (Beauregard, 2012; Bogler & Somech, 2004; Reizer & Hetsroni, 2015). These functions are based on self-regulatory efficacy to guide and motivate an individual to carry out various tasks.

Specifically, an individual will predict his/her behaviour in capabilities on whatever is needed to successfully perform a task. Hence, he/she will likely to set higher goals, commit to more difficult challenges, and strive to achieve those goals (Zulkosky, 2009). Perceived self-efficacy individuals will evaluate their capability and then execute in the given types of performances and outcome expectations. Individuals will be likely to voluntarily assist an organisation since they are capable of managing and organising their workdays to accommodate an extra-role behaviour. Figure 2.3 shows the source of self-efficacy that relates to an individual's performance behaviour.
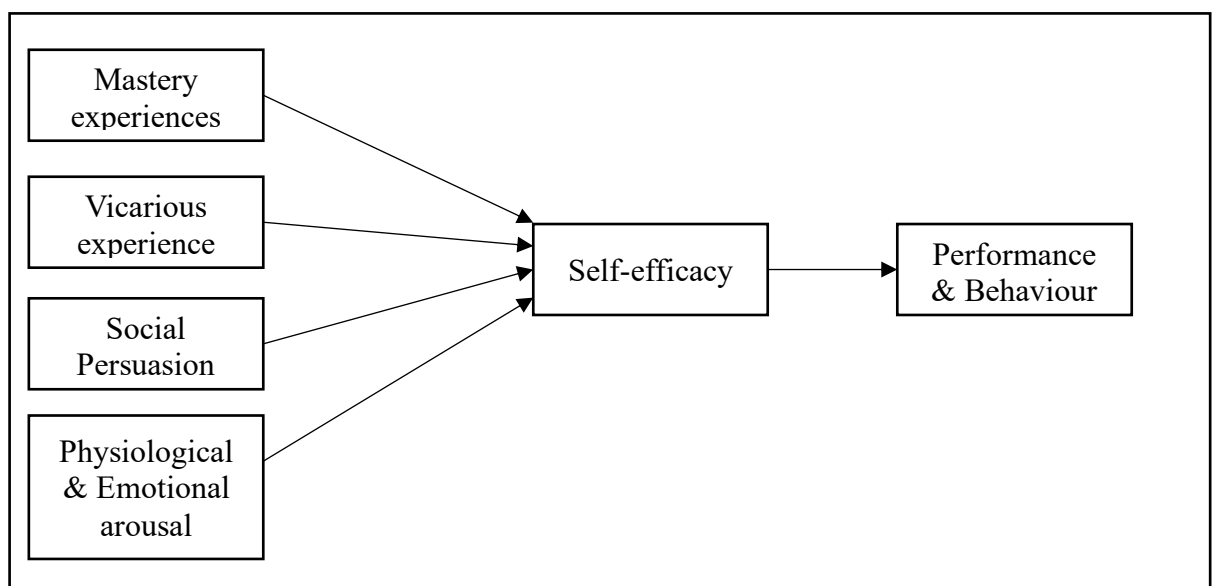
Figure 2.3: Model of social cognitive theory by Bandura (1986)

The self-efficacy belief model illustrates that employees who received supports from the supervisor represents a verbal persuasion hence will be more confident to perform an additional task such as citizenship behaviour. They view supervisor supports as recognition and appreciation from their organisation (Dysvik & Kuvaas, 2013). Supervisor support gives a signal to the employees that they are valuable and competent as a proof of the mastery self-view of efficacious individuals (Chen, Li, & Leung, 2016).

Hence, Gountas, Gountas, and Mavondo (2014) state that employees with low self-efficacy may have greater impact on their emotional stress, which requires more support from an organisation. As such, an individual who perceives support from a supervisor will be likely to have a positive view and maintain loyalty towards his/her organisation. An individual with higher self-efficacy will be more attentive towards the supports given by the supervisor, and he/she will respond more favourably in terms of willingness to engage in extra-work in their jobs. This individual will have such confidence to successfully perform his/her citizenship behaviour when he/she received such provision from the supervisor.

Previously, in 1989, Bandura mentioned that individuals with low self-efficacy is unsure about their competence, have low self-evaluation of their capabilities, and tend towards a negative outcome (Bandura, 1989). Due to the lack of support from a supervisor, an individual with low self-efficacy would feel less motivated and would perceive his/her self-view as low competence. Consequently, he/she will be less likely to engage in an additional task in completing his/her jobs, which gives a negative affect towards the relationship with his/her supervisor.

The mediating role of self-efficacy between supervisory support and OCB can also be explained by the COR theory. When individuals perceive support from their supervisor, their job resources such as self-efficacy will be enhanced. These individuals may experience a resource gain spiral (Hobfoll, 2001) in which the acquisition of additional resource could facilitate the generation of further resources (Brummelhuis & Bakker, 2012). According to the corollaries proposed by Halbesleben et al. (2014), when individuals gain resources, they tend to invest the excessive resource in order to gain resources. As a result, they would engage in citizenship behaviour to continuously receive support from their supervisor while maintaining self-confidence.

The review of the literature on studies in the context of Malaysia showed a lack of empirical study on the role of support given by a supervisor towards individuals' self-efficacy that results in behavioural outcome. To the researcher's best knowledge, only one study examines self-efficacy as a mediator variable. The study by Hidayah et al. (2019) reported that self-efficacy partially mediates the relationship between supervisory support and behavioural outcome.

Therefore, there is clear gap between the past and current research related to behavioural outcome, such as OCB. The present study therefore is an attempt to investigate the role of self-efficacy and its effect on the relationship between supervisor support toward OCB, and therefore, the following hypothesis is proposed:

Hypothesis 3c: Self-efficacy mediates the relationship between supervisory support and organisational citizenship behaviour.

2.13 Summary of Research Hypotheses

The corresponding ten (10) hypotheses are described in order to answer the main research questions addressed in Chapter 1. Table 2.4 describes the specific research questions and hypotheses that need to be investigated in this study.

Table 2.4: Summary of research questions and research hypotheses

Research questions	Research hypotheses
1. What are the effects of work-FC, Family-WC, supervisory support and self-efficacy on organisational citizenship behaviour?	H1a: There is no significant relationship between work-FC and organizational citizenship behaviour H2a: There is no significant relationship between family-WC and organizational citizenship behaviour H3a: There is no significant relationship between supervisory support and organizational citizenship behaviour H4: There is no significant relationship between self-efficacy and organizational citizenship behaviour
2. What are the effects of work-FC, family-WC, supervisory support on self-efficacy?	H1b: There is no significant relationship between work-FC and self-efficacy. H2b: There is no significant relationship between family-WC and self-efficacy. H3b: There is no significant relationship between supervisory support and self-efficacy.

3. Does self-efficacy mediates the relationship between work-FC, family-WC, supervisory support and OCB?	H1c: Self-efficacy mediate the relationship between work-FC and organisational citizenship behaviour. H2c: Self-efficacy mediate the relationship between family-WC and organisational citizenship behaviour. H3c: Self-efficacy mediate the relationship between supervisory support and organisational citizenship behaviour

2.14 Chapter Summary

This chapter provides the review of the relevant literature about OCB in various context in order to provide an extensive understanding of OCB. The review serves and provide a clear picture of the extent of the existence of OCB in the western context, among ASEAN countries and specifically in the Malaysian context. The review of the literature reveals that work-FC, family-WC and supervisory support may be the possible antecedents of OCB in the public sector in Malaysia.

The analysis of literature about OCB in Malaysia reveals that OCB is a distinctive factor that has significant reflections of the public service. Based on these results, the study provides a theoretical framework that includes the above mentioned. The study also proposed hypotheses that illustrate the relationship of work-FC, family-WC, supervisor support, and self-efficacy on OCB.

CHAPTER 3: RESEARCH METHODOLOGY

3.1   Introduction

In the previous chapter, hypotheses were developed to be tested. The result can be meaningful when the study was conducted with an appropriate methodology. Thus, this chapter presents the methodological approach adopted for study. First, the philosophical paradigm and research design of this study is highlighted. Then, the section describes the unit of analysis, the population, and the sampling procedure for the data collection. This is followed by a discussion on the requirements of the sample size for the study.

Next, a brief overview of the instrumentation used is provided in the fourth section. The self-administered questionnaire preparation is discussed followed by the assessment of the validity and reliability of the questionnaire developed on the basis of the literature and the validity of the measurement. Lastly, the statistical analysis techniques used in this study is described, including the measurement model, structural model, and hypotheses testing.

3.2   Research Paradigm

According to Sekaran and Bougie (2016), social science research has identified four alternative paradigms: (a) positivist, (b) constructivist, (c) transformative, and (d) pragmatic. A positivist research involves theory testing and looking at generalised patterns based on an objective view (Bhattacherjee, 2012). The design employs a deductive approach to theory and hypothesis testing, particularly for statistical analysis of empirical data. The key approach of positivism is experimentation to test any cause-and-effect relationship in a framework (Creswell, 2014).

On the other, the constructivist paradigm aims to understand the rules people use to make sense of the world, particularly by investigating what happens in people's mind (Sekaran & Bougie, 2016). The paradigm emphasises on how people view the world based on their interactions within a certain context. The constructivist design employs the induction reasoning approach through a qualitative methodology, such as unstructured interviews and focus-group, in order to understand a specific case.

Transformative refers to the study of lives and experiences of diverse groups that have traditionally marginalised (Creswell & Creswell, 2018). Previous studies that were based on these assumptions appear to adopt the mixed method design, which informs the overall purpose of the study, the research questions, the data collection and the outcome of the study (Creswell, 2012). According to Mertens (2010), a transformative research uses a program theory of beliefs about how and why the program works on existing problems, such as oppression, domination, and power relationships.

Pragmatism researchers view an objective, observable phenomenon, and the subjective meanings combined can produce useful knowledge based on the research questions of a study. The focus of pragmatism is on practicality; pragmatists describe research as a process in which theory and concept are the important tools for understanding actions and experiences through interaction with the surrounded environment (Sekaran & Bougie, 2016). According to Creswell (2014), pragmatism applies a mixed methodology consisting of quantitative and qualitative approaches to look at what and how for an intended consequence.

Each of the paradigms mentioned above are underlined by the following five main assumptions:

1. *Ontology:* refers to the assumptions on how do we see the world, for instance, the assumptions on the nature of reality about the way the world operates and the commitment to hold on to particular views (Saunders, Lewis, & Thornhill, 2009).

2. *Epistemology*: refers to the assumptions about the best way to study the world, for instance, the way researchers use to study social reality either by an objective or subjective approach (Bhattacherjee, 2012)

3. *Axiological*: refers to a researcher's view of the roles of values in research (Saunders et al., 2009).

4. *Methodology*: refers to the procedure of research used to acquire knowledge.

This study applies the positivist ontology paradigm with an empirical epistemology by means of the quantitative methodology approach. A positivist research aims to identify the causal explanation for the regularities in human social behaviour. The approach begins with the reliability of observations, the collecting of data, theory testing, and the generalisability of findings (Creswell, 2014; Sekaran & Bougie, 2016). In regard to research on citizenship behaviour, a significant number of studies (Aderibigbe, Nwokolo, & Oluwole, 2019; Belwalkar, Vohra, & Pandey, 2018; Khurram, Muhammad, Syed Shahbaz, Muhammad, & Qadeer, 2017; Lau et al., 2016; Majeed, Mohd Nor, & Mohd Mustamil, 2017) were conducted by means of the quantitative approach. In other words, there is already a well-established body of literature with known variables and theories to

support the research work of this study. This study aims to objectively measure a social phenomenon, in this case, the relationship between work-FC, family-WC, supervisory support, and organisational citizenship behaviour under the mediating effect of self-efficacy.

The positivist paradigm was deemed appropriate for this study following the advantages of applying a scientific method. The method allows researchers to test hypotheses and rely on objective measures to support findings (Creswell & Creswell, 2018), as well as avoid speculations and bias in the interpretation of the findings (Bhattacherjee, 2012). Sekaran and Bougie (2016) stress that a quantitative approach provides strong reliability and validity on the verification of hypotheses. A quantitative method is a deductive approach in which the researcher achieves reasoned conclusions by a logical generalisation of a known fact (Creswell, 2012; Sekaran, 2003). The quantitative approach is therefore capable of focusing on the interrelationship among numerous criteria (Arda, Delen, Tatoglu, & Zaim, 2017).

Another advantage of using the scientific method is that the data could be replicated to other contexts for theory testing and for verification purposes (Saunders & Lewis, 2012). Therefore, the positivist approach can be seen as an avenue for a study in the Malaysian context, particularly in enhancing understanding of antecedents and outcomes of organisational citizenship behaviour.

In summary, this study adopted a positivist paradigm, empirical, and quantitative approach based on three main principles. First, the researcher assumes that there are underlying law and principles of cause and effect which govern how things work in the world. Secondly, once the law and principle have been discovered by the researcher

through manipulation and observation, the next step is to describe the phenomenon from the direct observation and objective measure. Finally, a well-established and justified statistical techniques are used in analysing the data to counter the speculation and biases.

3.3   Research Design

A research design is a plan, structure and strategy of investigation to obtain answers to research questions or problems (Kumar, 2011). According to Hair et al. (2017), there are three main types of research designs, namely exploratory, descriptive, and causal design. Exploratory study aims to "seek new insights, ask new questions and to assess topics in a new light" (Saunders & Lewis, 2012, p. 110). It is much suited to qualitative methods, such as interviews, informal discussions, focus groups, and case studies (Sekaran & Bougie, 2016).

A descriptive study is often designed to collect data that describe the characteristics of objects, events, or situations, while a causal study is designed when a researcher is interested in delineating one or more factors that are causing a problem (Saunders & Lewis, 2012; Sekaran & Bougie, 2016). Descriptive and causal studies are often carried out using four basic design techniques, namely surveys, experiments, secondary data and observation. According to Zikmund, Babin, Carr, and Griffin (2010), the objectives of a study, the availability of data sources, and the cost of obtaining the data will determine the selection of a proper type of research design.

As stated in the *Oslo Manual: Guidelines for collecting and Interpreting Innovation Data*, the survey method is the most common method of gathering primary data. In the case of the present study, the absence of any secondary data regarding the model

necessitates the use of the survey method. Survey is the most popular and common technique for conducting a descriptive research. It can be described as a survey procedure towards a sample or to the entire population of people to describe the attitude, opinions, behaviours or characteristics of the population (Creswell, 2012). The advantages of the survey method have been noted as follows: this method is simple to administer; the data obtained are reliable; variability is less; and coding, analysis and interpretation of the data are relatively simple (Malhotra & Birks, 2007). Thus, this technique allows data to be collected in an economical way in a large population (Saunders, Lewis, & Thornhill, 2009).

There are two types of a time horizon in a survey research design: (1) cross-sectional study and (2) longitudinal study. In a cross-sectional study, the data are gathered in just at one-point at a time and it can measure current attitudes, beliefs, opinions or practices towards certain issues (Sekaran, 2003). This study employed a cross-sectional survey design to test the relationship between variables only at one point in time. Applying a cross-sectional survey design has several advantages. First, this approach provides more time and energy saving (Sekaran & Bougie, 2016). Second, the major advantage of the cross-sectional design over the longitudinal design is that the former allows better representative sampling and low response bias (Malhotra & Birks, 2007).

The disadvantages of cross-sectional study is that this approach is unable to detect any changes and does not allow the inference of the possibility of cause and effect over a period of time (Malhotra & Birks, 2007). This approach also leads to common method bias, which refers to the amount of covariance shared between independent variables and dependent variables (Bhattacherjee, 2012). Such limitations, however, are countered by

using two approaches of common method variance: procedural approach and statistical approach. These measures are explained further in the following chapter.

3.4   Population of the Study

According to Creswell (2012), a population is a group of individual that have similar characteristics. It refers to the entire group of people, events or things of interest to be investigated (Sekaran, 2003). The specific target population is identified and the information were obtained from them instead of from those who are most conveniently available (Sekaran & Bougie, 2016). The study population for this study is Administrative and Diplomatic Officer (ADO) with grade M41 until M54 in Professional and Management level. According to Public Service Department (2019), there are 24 ministries located in Putrajaya with approximately around 9050 population size of ADOs.

An administrative and diplomatic scheme is a shared scheme that can be assigned in any ministry, federal or local department, and agency in domestic or foreign offices within the public sector. According to Public Services Commission of Malaysia, ADOs are responsible in planning, formulating and executing the public policies under eight (8) fundamental area such as human resource and organisation management, financial resources, economic, administrative and development of province/regional/local/land, social planning and administration, international relations and foreign affairs (including foreign services), national security/defence and information technology management (Public Service Commission, 2019). ADOs also refers to the job position under administrative and diplomatic service with position rankings such as M41, M44, M48, M52 and M54 (Syukri et al., 2013).

The sample size was also determined by several other factors such as sufficiency of data to do structural equation modelling for data analyses, as well as the time limitation and resources constraint from the researcher part in conducting the survey. The following section describes the determination of sample size as suggested by previous researchers.

3.4.1 Sample Size

Previously, Anderson and Gerbing (1988) suggest that a minimum sample size of 100 to 150 to be satisfactory when constructing structural equation models. Hair, Black, Babin, and Anderson (2010) also proposed a SEM sample size guideline based on the numbers of latent variables. For latent variable less than five and number of indicators on latent variable of more than three, the appropriate sample size is from 100 to 150. Recently, Hair, Hult, Ringle, and Sarstedt, (2016) suggest that the minimum sample size recommended should be 10 times the maximum number of arrows pointing at a latent variable in the model. Following the suggestion, there are three paths were directed at a latent construct in this study, and therefore, a minimum sample size of 30 was considered sufficient.

Alternatively, G*Power analysis can be used to determine the sample size in a PLS-based analysis. G*Power is a power analysis programme used to provide sample-size calculations and power calculations (Faul, Erdfelder, Buchner, & Lang, 2009). According to statistical G*Power analysis, the minimum sample size with a medium effect size of 0.15 is 74.

Additionally, Cohen (1992) recommends a sample size of a statistical power of 80% with significant level of 1%, 5% and 10% and minimum R^2 values of 0.10, 0.25, 0.50 and

0.75 with the maximum number of arrows pointing at construct. It shows that the number of independent variables in the models is three (3), and the range of sample size required is between 83 and 145. Therefore, this study follows Hair's et al. (2016) and Cohen's (1992) suggestion and the range of sample size in the present study was determined to be 30 to 145 of respondents.

3.4.2 Sampling Techniques

Random sampling method could not be adopted in this study because there is no available list name of employees from the organisations and because there are no exact numbers of total employees. Instead, this study utilised population sampling for the purpose of providing data and information about the study. The population sampling was used by taking all the population as the sample of study to reduce the possibility of low response in small sampling frame settings (Sekaran, 2003).

The specific target population was identified and obtained the information from them instead of those who were most conveniently available (Sekaran & Bougie, 2016). The population sampling is taken into account a specific type of targeted respondents based on the predetermined criteria, and the respondents were to conform to that certain criteria. Specifically, the target respondents refers to the ADOs from professional and management level in the organisation. Any employees that different and lower from the position's scheme were ineligible to be the respondents for the study. Hence, participation in this study was voluntary. There will always be a margin for error although a sample may be accurately generated from a population. Unlike other methods, population sampling technique is the most accurate since the entire respondents from the organisation was included for the study.

3.4.3 Unit of Analysis

Unit of analysis refers to the unit of person, collective or object as the target to gather the data (Creswell, 2012). A common unit of analysis includes individuals, dyads groups, organisations, countries, and objects, depending on the focus of the study (Bhattacherjee, 2012; Sekaran, 2003).

This study is interested in the citizenship behaviour of the employees in an organisation, and therefore, the unit of analysis is the ADO in a government ministry. This type of professional and management level position was chosen because it is a strategic and important position responsible for policy formulations and executing the development strategies (Mohamad Noorman, Nur Izzati, Siti Arpah, & Rusnah, 2013). The decision made by the ADOs represents the government image because it can give a high impact on the public service delivery system (Gangeswari, Roziah, Maimunah, & Bahaman, 2015).

3.5   Instrumentation

A set of questionnaires was developed and used to gather the relevant data for this study. The constructs in this study were evaluated by incorporating the measurements from previous studies, such as work-FC, family-WC, supervisory support, self-efficacy, and organisational citizenship behaviour. Table 3.1 shows the sources of instrumentation used for this study.

Table 3.1: Instrumentation

Variable	No. of items	Source	Cronbach Alpha
Organizational citizenship behaviour	16	Lee and Allen (2002)	0.88
Work-FC	9	Carlson, Kacmar and William (2000)	0.91
Family-WC	9	Carlson, Kacmar and William (2000)	0.87
Supervisory support	16	Kottke and Sharafinski (1988)	0.98
Self-efficacy	6	Rigotti, Schyns, and Mohr (2008)	0.90

3.5.1 Organisational Citizenship Behaviour Measurement

OCB was measured by using the 16 items developed by Lee and Allen (2002). Lee and Allen developed this scale based from the pool of previous OCB scales. This scale has been adapted for the Malaysian environment in a previous study (Jehad, Farzana, & Mohmad, 2011; Jihad, Farzana, & Rosmini, 2016; Kasa & Zaiton, 2015, 2016). The instrument was measured using a six-point Likert type scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Example of items include "assist others with their duties" and "express loyalty toward the organisation." The Cronbach's alpha value of the scale is 0.88 (Lee & Allen, 2002). Table 3.2 describes the items measuring OCB.

Table 3.2: Items constituting organisational citizenship behaviour scale

1	I help others who have been absent
2	I willingly give my time to help others who have work-related problems.
3	I adjust my work schedule to accommodate other employee's request for time off.
4	I go out of my way to make newer employees feel welcome in the work group.
5	I show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.
6	I give up time to help others who have work or non-work problems.
7	I assist others with their duties.
8	I share personal properties with other to help their work.

9	I attend functions that are not required but that help the organization image.
10	I keep up with developments in the organization.
11	I defend the organization when others employee criticises it
12	I show pride when representing the organization in public
13	I offer ideas to improves the functioning of the organization
14	I express loyalty toward the organization
15	I take action to protect the organization from potential problems
16	I demonstrate concern about the image of the organization

Source: Lee and Allen (2002)

3.5.2 Work-FC Measurement

The work-FC variable was measured by using an instrument adopted from Carlson et al. (2000). The variable has been measured separately with family-WC as it has a unique set of consequences (Haslam, Filus, Morawska, Sanders, & Fletcher, 2014; Sanaz, Khadijah, & Syaqirah, 2015). The work-FC variable consists of nine-items, including items such as "My work keeps me from my family activities more than I would like" and "When I get home from work, I am often too physically tired to participate in family activities/responsibilities." The respondents were asked to state their opinions based on a six-point Likert scale anchored at 1 (*strongly disagree*) to 6 (*strongly agree*). The authors reported that the coefficient alpha is 0.91. Table 3.3 shows the nine items that measure work-FC.

Table 3.3: Items constituting work-FC scale

1	My work keeps me from my family activities more than I would like.
2	The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3	I have to miss family activities due to the amount of time I must spend on work responsibilities.
4	When I get home from work, I am often too exhausted to participate in family activities/responsibilities.
5	I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.

Table 3.3, Continued

6	Due to all the pressures at work, sometimes when I come home, I am too stressed to do the things I enjoy.
7	The problem-solving behaviours I use in my job are not effective in resolving problems at home.
8	Behaviour that is effective and necessary for me at work would be counterproductive at home.
9	The behaviours I perform that make me effective at work do not help me be a better parent and spouse.

Source: Carlson, Kacmar and Williams (2000)

3.5.3 Family-WC Measurement

Family-WC was measured by the nine items developed by Carlson et al. (2000). This instrument queries by using a six-point Likert type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Examples of items include "I have miss work activities due to the amount of time I must spend on family responsibilities" and "Due to stress at home, I am often preoccupied with family matters at work." The Cronbach's alpha value for this variable is 0.87. Table 3.4 shows the items for family-WC.

Table 3.4: Items constituting family-WC scale

1	The time I spend on family responsibilities often interferes with my work responsibilities.
2	The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.
3	I have to miss work activities due to the amount of time I must spend on family responsibilities.
4	Due to stress at home, I am often preoccupied with family matters at work.
5	Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.
6	Tension and anxiety from my family life often weakens my ability to do my job.
7	The behaviours that work for me at home do not seem to be effective at work.
8	Behaviour that is effective and necessary for me at home would be counterproductive at work.
9	The problem-solving behaviour that works for me at home does not seem to be as useful at work.

Source: Carlson, Kacmar and Williams (2000)

3.5.4 Supervisory Support Measurement

Supervisor support was measured using the 16-item questionnaire developed by Kottke and Sharafinski (1988). Two items from the list are a reversed statement item: item 2 and item 12. The instrument queries with a six-point Likert type scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Examples of items include "My supervisor strongly considers my goals and values" and "My supervisor really cares about my wellbeing". The reliability value for this is measurement is 0.98 (Kottke & Sharafinski, 1988). Table 3.5 shows the items for measuring supervisory support.

Table 3.5: Items constituting supervisory support scale

1	My supervisor values my contributions to the well-being of our department.
2	If my supervisor could hire someone to replace me at a lower salary, he/she would do so (R)
3	My supervisor appreciates extra effort from me.
4	My supervisor strongly considers my goals and values.
5	My supervisor wants to know if I have any complaints.
6	My supervisor takes my best interests into account when he/she makes decisions that affect me.
7	Help is available from my supervisor when I have a problem.
8	My supervisor really cares about my well-being.
9	If I did the best job possible, my supervisor would be sure to notice.
10	My supervisor is willing to help me when I need a special favour.
11	My supervisor cares about my general satisfaction at work.
12	If given the opportunity my supervisor would take advantage of me (R)
13	My supervisor shows a lot of concern for me.
14	My supervisor cares about my opinions.
15	My supervisor takes pride in my accomplishments.
16	My supervisor tries to make my job as interesting as possible.

Source: Kottke and Sharafinski (1988)

3.5.5 Self-efficacy Measurement

Self-efficacy was measured by the six-items developed by Rigotti, Schyns, and Mohr (2008). According to the Rigotti and colleagues, this scale consists of the most recent items developed and reformulated particularly for work context (Rigotti et al., 2008). Examples of items include "I can remain calm when facing difficulties in my job because I can rely on my abilities" and "I meet the goals that I set for myself in my job". The participating employees will respond using a six-point Likert type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The reliability value supports a good internal consistency with a Cronbach's alpha value of 0.90 (Rigotti et al., 2008). Table 3.6 shows the items measuring self-efficacy.

Table 3.6: Items constituting self-efficacy scale

1	I can remain calm when facing difficulties in my job because I can rely on my abilities.
2	When I am confronted with a problem in my job, I can usually find several solutions.
3	Whatever comes my way in my job, I can usually handle it.
4	My past experiences in my job have prepared me well for my occupational future.
5	I meet the goals that I set for myself in my job.
6	I feel prepared for most of the demands in my job.

Source: Rigotti, Schyns and Mohr (2008)

3.5.6 Demographic Data

The sixth section of the questionnaire queries the respondent's demographic data such as gender, age, race, marital status, education level, tenure in organisation and position grade of the respondents.

3.6   Self-administered Questionnaire

The purpose of the survey was to collect necessary data by using questionnaires. A self-administered questionnaire is one of the instruments used for a survey research. A questionnaire is a form used in a survey design where participants need to answer questions and provide basic demographic information and return the form to the researcher (Creswell, 2012). The use of self-administering questionnaire is said to make a data collection process more efficient in terms of time, energy, and costs (Sekaran, 2003), hence was considered appropriate for this study. (The questionnaire used for the data collection in attached as Appendix A of this thesis).

3.7   Questionnaire Preparation

This study involved the use of self-administered questionnaire to collect the data for the purpose of empirically testing the constructs in the model. The following section describes the questionnaire format, its structure, and the scale used for each of the variables in the model.

A questionnaire design includes a series of systematic and logical activities (Hair et al., 2016). A questionnaire design should translate the information needed, encourage and motivate respondents to participate and cooperate, and minimise response error that arises from inaccurate answers (Malhotra & Birks, 2007). The structure of a questionnaire in terms of words, questions, and format structure is to be integrated into a recognisable and hierarchical system.

Given the points above, the questionnaire for this study was designed to contain structured questions of measurement instruments in the form of closed-ended questions where the respondents are required to choose a response from a predetermined set of scales (Sekaran & Bougie, 2016). The questionnaires begins with a brief information of the study. This section is then followed by six sections containing items that enquire each of the constructs. The last section queries the respondent's demographic background, such as gender, age, race, marital status, education level, tenure in organisation, and grade.

The Likert-type scale format was used in the questionnaire for this study. The Likert-type scale is based on the assumption that each statement/item in a questionnaire has an equal attitudinal value, which reflects on the "importance" or "weight" in the question (Kumar, 2011). The items in the Likert scale are anchored to a six-point type ranging from "strongly disagree" to "strongly agree." The use of the six-point scale gives a higher reliability value than the five-points type and four-points type Likert scales (Chomeya, 2010).

Furthermore, according to Chomeya (2010), the use of six-point scale is to avoid grouped response on the neutral point, and respondents have the choices to choose separately between "agree" and "disagree" in balance. Respondents tend to answer neutral response when they "do not care," "do not want to choose," and have no opinion on the questions (Tsang, 2012). A previous study has found no significant differences between the odd scale (five-point) with an even scale (six-point) (Chomeya, 2010). Therefore, the use of a six-point Likert type scale was considered relevant for the response in the questionnaires used in this study.

3.8 Questionnaire Translation Procedure

All the variables in the instrument of this study were adopted from the existing literature. The instrument adopted from the original source has shown a higher reliability value. According to Hyman, Lamb, and Bulmer (2006), using an existing survey questionnaire can provide several advantages to the study. First, the questions have been tested hence are good indicators of the concept of interest. Secondly, it is much money and time saving as the questions do not need to be designed and developed.

3.9 Pilot Study

A pilot study is also known as a feasibility study (Kumar, 2005). The purpose of a pilot study is to test and refine a questionnaire so that the respondents will have no problem in answering the questions (Saunders et al., 2009). Pilot testing allows a researcher to identify potential problems in the instrument and ensures that the measurement instrument used in the study are reliable and the valid measures of a construct (Bhattacherjee, 2012).

The minimum sample size required for the pilot study is 80 with a 95% confidence interval as suggested by Hertzog (2008). Out of the 200 questionnaires distributed, 94 questionnaires were received as the sample for the pilot study. The respondents of the questionnaire consisted of employees from the four organisations as mentioned (Public Service Department, Ministry of Home Affairs, Ministry of Education and Ministry of Health). Outcome from the pilot study confirmed that the questionnaire did not require any major changes except for improvement in terms of readability and clarity of the instructions.

3.10 Data Analyses of Pilot Study

The pilot study data collected were analysed using SPSS version 25 by means of descriptive analyses, such as frequencies, and percentages. The subsequent processes were the reliability analysis and the check for the validity of the instrument.

3.10.1 Descriptive Statistics of Pilot Study

The descriptive statistics of pilot study include frequency and percentage on the profile of respondents. Table 3.7 shows the demographic profile for the pilot study.

Majority of the respondents who participated in the pilot study are female (70.2%). The respondents were divided into four age groups of 20 – 29, 30 – 39, 40 – 49 and 50 years old and above. The 30-39 age group was the largest (66%) followed by the 40 -49 age group (19.1%) and the 20 – 29 age group (13.8%). As for race, majority of the respondents (93.6%) are Malay. Most of the respondents (72.3%) are married and others are single (25.5%), separated (1.1%), and divorced (1.1%).

In terms of education level, majority of the respondents (52.1%) are graduates with a bachelor degree and 47.9% are graduates with a master degree. As for length of service, majority of respondents (38.3%) have more than 10 years of service; 30.9% of the respondents have been working for 6 – 9 years followed by 1 – 2 years (19.1%) and 3 – 5 years (11.7%). Most of the respondents are from grade M48 (41.5%) followed by M44 (39.4%) and M41 (19.1%).

Table 3.7: Demographic profile of the respondents (n=94)

Demographic	Category	Frequency	Percentage (%)
Gender	Male	28	29.8
	Female	66	70.2
Age	20 - 29	13	13.8
	30 - 39	62	66.0
	40 - 49	18	19.1
	50 years and above	1	1.1
Race	Malay	88	93.6
	Chinese	2	2.1
	Indian	1	1.1
	Others	3	3.2
Marital Status	Single	24	25.5
	Married	68	72.3
	Separated	1	1.1
	Divorced	1	1.1
	Widowed	0	0
Education	Bachelor Degree	49	52.1
	Master Degree	45	47.9
	PhD	0	0
Tenure	1 - 2 years	18	19.1
	3 - 5 years	11	11.7
	6 - 9 years	29	30.9
	10 years and above	36	38.3
Grade	M41	18	19.1
	M44	37	39.4
	M48	39	41.5
	M52	0	0
	M54	0	0

3.10.2 Reliability Analysis of Pilot Study

Reliability refers to the consistency of observation in attaining the same results (Sekaran & Bougie, 2016). Reliability can be defined as the degree to which measurements on different occasions or observers in a similar or parallel tests and produce the same results (Streiner, Norman, & Cairney, 2014). Reliability of the scales can be measured by using Cronbach's alpha values. These values are one of the most indicators of the internal consistency of a scale (Creswell, 2014).

In this study, reliability analysis was conducted for the pilot study (n = 94). Based on the analysis result, the OCB instrument Cronbach's alpha was 0.88. For work-FC and family-WC, the reliability value obtained was 0.91 for both constructs. Supervisory support received a Cronbach's alpha value of 0.89 and self-efficacy received a Cronbach's alpha value of 0.87. According to Sekaran and Bougie (2016), a Cronbach's alpha value of less than 0.60 is considered to be poor; a value of less than 0.80 is considered acceptable; and a value above 0.80 is considered good. Therefore, all the instruments are considered as reliable because the values recorded are above 0.80. Table 3.8 shows the reliability results obtained from the pilot study.

Table 3.8: Findings from reliability analysis from pilot study (n = 94)

Variables	No. of items	Cronbach's alpha
Organizational citizenship behaviour	16	0.88
Work-FC	9	0.91
Family-WC	9	0.91
Supervisory support	16	0.89
Self-efficacy	6	0.87

Note: Cronbach's alpha values above 0.6 are acceptable and above 0.80 are good (Sekaran & Bougie, 2016)

3.10.3 Validity of Pilot Study

According to Hair, Black, Babin, and Anderson (2014), validity is a degree to which a measure represents accurately the concept of a study. Validity is a test on a developed instrument that measures a particular concept in which it is intended to measure (Sekaran & Bougie, 2016). In this study, a validity test was conducted on all of the constructs to ensure that the measure is stable and accurately measures what it is supposed to measure. Two types of validity test were employed: content validity and construct validity.

Content validity refers to the set of items that is adequate and representative of a particular concept (Sekaran, 2003). Hence, content validity provides an "adequate coverage" (Saunders, Lewis, & Thornhill, 2012) of the questions in the questionnaire. As suggested by Kumar (2011), content validity can be assessed in two ways: through face validity and expert review. Face validity is one of the basic and minimum indexes of content validity. Another way to measure the content validity the items is through expert judges.

In this study, content validity was tested in two ways following the suggestion by Saunders, Lewis, and Thornhill (2012). First, all the items measuring the variables were taken from the most well-known measurements from the previous literature after reviewing the evolution of the variables. The subject can provide a more clear picture of the limitations, dimensions, and components by determining a precise definition of subject interest (Yaghmale, 2003). Hence, an additional validity assessment was necessary because the instrument of supervisory support and self-efficacy has rarely been used for the Malaysian context. For this reason, content analysis was further assessed by one of the officers from each of the organisation as a representative of the target population.

3.11 Data Collection: Actual Study

The data collection process commenced by getting an approval from the Human Resource Department from Public Service Department as the main centre of public administration. An official email was sent to the organisation to explain the objective of the study and to request permission to distribute questionnaires for data collection purpose. Attached to the email was a brief information of the research and a copy of the

survey questionnaire that will be used for the data collection. A student confirmation letter from the faculty was also provided as a supporting document.

During a meeting with the officer from the Human Resource Department, the officer recommended that the questionnaires be distributed to another additional three (3) ministries: Ministry of Home Affairs, Ministry of Education, and Ministry of Health with a total of 1140 Administrative and Diplomatic Officer. The recommendation provided was to ensure that the data collection was comprehensive and coming from various organisational backgrounds. Following the recommendation, an official email requesting approval for distribution of survey questionnaires was also sent to the additional three (3) ministries. Approvals were received via email from the three ministries within two weeks from the initial mailing.

The questionnaires were self-administered and distributed via walk-in to the 1140 ADO from the four organisations. The distribution of the questionnaires was assisted by an officer from each organisation because of the organisation policy which restricts researchers from communicate directly with the respondents. The respondents received a questionnaire with an envelope and were asked to put their completed survey into the envelope, seal it, and return it to the officer in charge. This procedure was to preserve anonymity as well as reduce respondents' reluctance to answer the questionnaires truthfully. The cover of the questionnaire assures the respondents that their answers will be kept confidential.

The status of the data collection was updated every two weeks after the distribution. Reminders and progress update via email, phone calls, and text messages were also made to the officers. An update on the number of returned questionnaires received from the

respondents was also reported by the officer. The following section describes the procedure of the pilot test in this study.

3.12 Data Analysis: Actual Study

The data analysis procedure for this study was conducted in two stages. The first stage was a descriptive analysis in terms of means, standard deviation, frequency, and percentage. The analysis was conducted using SPSS version 25 (SPSS Inc. 2017) and Partial Least Squares-Structural Equation Modelling (SmartPLS) (Hair, Hult, Ringle, & Sarstedt, 2014).

3.13 Structural Equation Modelling (SEM)

The statistical methods employed in previous studies were the first-generation technique, including the regression-based approach, such as multiple regression, logistics regression, and analysis of variance (Hair et al., 2014). SEM was then considered as the second-generation technique which includes a principal component analysis and a multidimensional analysis (Fernandes, 2012).

Structural equation modelling allows researchers to test and estimate a model simultaneously, and test complex theories with empirical data (Sarstedt et al., 2014). SEM is highly useful for evaluating the measurement of latent variables and for testing the relationship between the latent variables (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Latent variables are known as unobserved variables that cannot be measured directly. In SEM, latent variables are represented as circles or ovals. They are called exogenous latent variable because they act as an independent variable (single-headed

arrows are going out) and an endogenous latent variable when they serve as a dependent variable (single-headed arrows are pointed to) (Sarstedt, Ringle, Smith, et al., 2014).

Sarstedt, Ringle, Smith et al. (2014) mentioned that the latent variables can be measured by observed variables (also known as a manifest variable). In particular, an observed variable consists of two groups: (a) single-headed arrows from construct to indicators referred as reflective indicators and (b) single-headed arrows from indicators to construct is called formative indicators (Hair et al., 2014). The identification of indicators is important in utilising the SEM method in hypothesised models.

Generally, there are two ways of statistical analyses under the structural equation modelling technique namely as co-variance based SEM (CB-SEM) and variance-based partial least squares (PLS) path modelling or PLS-SEM (Hair, Ringle, & Sarstedt, 2012). The differences between these two is that CB-SEM focuses on the relationships in the theoretical model established and in minimising the covariance matrix of a model.

In contrast, PLS-SEM predicts a variance-based approach on the endogenous variable and aims at maximising the variance represented by an R^2 value. According to Hair et al., (2014), PLS-SEM has higher levels of statistical power with complex model structures or smaller sample size compared to the covariance-based approach. Therefore, this study utilised the Structural Equation Modelling - Partial Least Squares (PLS-SEM) approach for the model analysis. This measure is explained in the following sections.

3.13.1 Partial Least Square (PLS) Approach

Partial Least Squares (PLS) has been increasingly popular in social sciences, marketing (Henseler, Ringle, & Sinkovics, 2009), strategic management (Hair, Sarstedt, Pieper, & Ringle, 2012) and other business disciplines (Sarstedt, Ringle, & Hair, 2014). PLS-SEM is also known as a component-based approach and variance-based approach. PLS-SEM often provides more robust estimations of the structural model (Hair, Ringle, & Sarstedt, 2011).

Additionally, Hair et al., (2014) also proposed a multi-stage process when applying PLS-SEM approach. The approach involves the specification of an inner and outer model, data collection and examination, actual model estimation and results evaluation. Inner model is also known as a structural model (evaluation on the relationship between construct) while the outer model known as a measurement model (evaluation of relationships between indicators of the construct).

Based on the recommendation from Hair et al., (2016), PLS-SEM method was chosen because it can assess a complex model and possess a large number of indicators and latent variables. PLS-SEM may have an advantage when employed with a more complicated model. According to Goodhue, Lewis, and Thompson (2012), the application of PLS-SEM on a complex model results with higher statistical power and path accuracy.

Second, PLS-SEM can be employed when the data is non-normal. PLS-SEM is less stringent when dealing with non-normal data (Hair et al., 2014). Whereas, the CB-SEM approach could raise a potential problem whereas results in non-normal data will be

underestimated standard errors and inflated goodness-of-fit measures. Therefore, smart-PLS is a great choice for statistical analysis of data in this study. The Smart Partial Least Square (PLS) software Version 3.0 (Ringle, Wende, & Becker, 2015) was used to assess the measurement and structural model.

3.13.2 Measurement Model

A measurement model or outer model specifies the relationship between observable variables and the underlying construct. The evaluation of the measurement model focused on two (2) analyses: reliability and validity of the measures used to represent each construct. In particular, this section analyses the composite reliability (internal consistency reliability) and its convergent validity (factor loadings and average variance extracted (AVE)) and discriminant validity (Fornell and Larcker criterion and Heterotrait-Monotrait ratio (HTMT)).

3.13.3 Composite Reliability

In the traditional method, the reliability of measures is evaluated using the internal consistency of Cronbach's alpha. However, the Cronbach's alpha assumes that all indicators involved are equally reliable. This is opposed to the PLS-SEM priority which focuses more on individual reliability. Therefore, it is considered more appropriate to apply composite reliability to measure the internal consistency of the construct, as suggested by Hair et al., (2014). A composite reliability value greater than 0.80 indicates a good internal consistency (Nunnally & Bernstein, 1994).

3.13.4 Construct Validity

Construct validity refers to "a type of validity that addresses the question of what construct characteristics the scale is measuring" (Malhotra & Birks, 2007, p. 359). Construct validity refers to how well the results obtained fit the theories that need to be tested (Sekaran & Bougie, 2016). Thus, construct validity is often used on the attitude scales, aptitude, and personality test construct (Saunders et al., 2009). For instance, an item's score is indirectly measured through the indicators of the target hypothetical latent construct. Construct validity consists of two subcategories of validity, namely convergent and discriminant validity. These two categories were assessed to determine the validity of the instrument used for the present study.

3.13.4.1 Convergent Validity

Convergent validity is "the extent to which the scale correlates positively with other measurements of the same construct" (Malhotra & Birks, 2007, p. 359). In the present study, convergent validity of the measurement was assessed by considering the factor loadings and average variance extracted (AVE) value of each of the constructs (Hair et al., 2014):

   a) Factor loadings: Higher loading on a construct shows that the related indicators in the construct are the mutual of an item (Hair et al., 2014). According to Hair and colleagues, any item with a factor loading of less than 0.40 will be deleted. If the items factor loading is within 0.40 to 0.70, it can be considered to be removed if it increases the AVE value. Hence, any item with a factor loading above 0.70 was accepted and retained as it indicates that the combined variance

shared between the constructs and indicators is larger than the measurement error variance.

b) Average Variance Extracted (AVE): AVE is defined as a total mean value of the squared loadings of the indicators associated with the construct (Hair et al., 2014). An AVE greater than 0.50 is desirable (Hair, Black, Babin, & Anderson, 2010) in that it indicates that the latent construct has a majority of variance in its indicators on average. Hence, it indicates a sufficient degree of convergent validity.

3.13.4.2 Discriminant Validity

According to Malhotra and Birks (2007), discriminant validity measures constructs that are supposed to differ between each other. In the analysis, discriminant validity was assessed using Fornell and Larcker criterion (Fornell & Larcker, 1981), cross-loading, and Heterotrait-monotrait (HTMT) ratio (Henseler et al., 2015).

a) Fornell and Larcker criterion: This method compares the average variance extracted (AVE) value of each construct with the shared variance between other constructs in the model (Voorhees, Brady, Calantone, & Ramirez, 2016). The value of the construct's AVE is larger than the AVE value of other constructs on the diagonal position (Wong, 2013). When the square root value of the AVE value is higher than the correlations, then all the constructs are considered the valid measures of unique concepts.

b) Cross-loadings assessment is an alternative approach for assessing discriminant validity. According to Hair et al., (2016), discriminant validity

is established when the value of correlations of items with their corresponding construct is higher than all other constructs. In particular, the loadings of the items should be greater than all of their cross-loadings. Therefore, the items are considered discriminant because they belong to the construct that it is intended to measure.

c)   Heterotrait-monotrait ratio (HTMT): Henseler et al., (2015) suggests the HTMT ratio method which is more reliable for assessing discriminant validity compared to Fornell-Larcker criterion and cross-loadings assessment. The HTMT method requires a calculation of the ratio of the average correlation between construct (Voorhees et al., 2016). In particular, measuring HTMT involves comparing the HTMT value with the predefined threshold value. For instance, a value of HTMT above the threshold of 0.85 (Kline, 2011) indicates a lack of discriminant validity. Any value that is less than the threshold value indicates that all the constructs are significantly different between each other.

3.13.5 Structural Model

In the structural model, the link between work-FC, family-WC and supervisory support was first assessed without the mediating variable in the model. Then, the mediating variable (self-efficacy) was inserted into the model. The path between (1) work-FC, (2) family-WC, (3) supervisory support, and (4) self-efficacy with OCB was analysed. Then, there was a direct link between work-FC, family-WC, supervisory support, and self-efficacy. Lastly, there was also an indirect relationship for mediation effect of self-efficacy between work-FC, family-WC, supervisory support and OCB.

To assess the proposed mediation effect (H5, H6, H7), the Zhao, Jr., and Chen's (2010) mediation analysis and bootstrapping approach (Hayes & Preacher, 2014) were employed. In order to determine the establishment of mediation effect and identify the type of mediation, this study followed the recommendation by Zhao et al., (2010) that only the indirect effect be considered as significant to establish a mediation effect in the model. The type of mediation or nonmediation will be based on the following suggestions (Hair et al., 2016; Zhao et al., 2010):

a) *Direct-only nonmediation*: The direct effect is significant but indirect effect is not.

b) *No-effect nonmediation*: The direct and indirect effect are not significant.

c) *Complementary mediation*: The direct and indirect effect is significant with the same point direction.

d) *Competitive mediation*: The direct and indirect effect is significant but points in the opposite direction.

e) *Indirect-only mediation:* The indirect effect is a significant and direct effect is not significant.

According to Hayes and Preacher (2014), the bootstrapping method using confidence interval is preferred because it is more powerful and rigorous (Zhao et al., 2010) compared to the Sobel test. Therefore, the bootstrapping method was used from the 5000 subsamples as recommended by Hair et al., (2014) and Preacher and Hayes (2008) to determine the significance of the indirect effect.

3.14 Chapter Summary

The third chapter introduces the research paradigm and research design as a basis in this study. The chapter describes the quantitative approach and the survey questionnaire method for the data collection. The population was identified and sampling size is explained. The instruments used for all the variables are also discussed in detail followed by a description of the data collection and data analysis process, including the descriptive and inferential statistics. Then, the structural equation modelling and its statistical approach are discussed in detail. Lastly, the hypotheses testing approach is described to answer the developed hypotheses based on the theoretical framework in this study.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter describes the statistical analysis result of the data. The section comprises five distinct parts. The first section discusses the initial examination of information such as coding the data, item reverse scoring, and dealing with missing value. Next, the second part presents a descriptive statistic on the demographic profile of the respondents. The third section discusses the multivariate assumptions such as normality, outliers, homoscedasticity, and multicollinearity. Further, the measurement model and structural model were analysed in the fourth section followed by hypotheses testing in the fifth sections by using Partial Least Square - Structural Equation Modelling (PLS-SEM).

4.2 Response Rate

The data collection period was completed within six months (middle of March to August 2018). Out of the 1140 questionnaires distributed, only seven hundred and fourteen (714) were received by the middle of September with a response rate of 62.6 per cent. Incomplete questionnaires were removed, leaving 691 questionnaires deemed usable for data analysis. The finalised response rate, as shown in Table 4.1, is 60.6 per cent.

Table 4.1: Response rate

Item	Descriptions		N	Per cent (%)
Total sampling size	4 Organisations		1140	100.0
Total target sample	4 Organisations		1140	100.0
Total questionnaires distributed	4 Organisations		1140	100.0
Total questionnaires received	• Public Service Department • Ministry of Home Affairs • Ministry of Education • Ministry of Health	194 171 179 170	714	62.6
Total usable responses	• Public Service Department • Ministry of Home Affairs • Ministry of Education • Ministry of Health	187 167 169 168	691	60.6
Non-responses			23	2.01

4.3 Data Screening

Prior to data analysis, the data were coded based on the recommendation by Sekaran and Bougie (2016) and were entered into SPSS version 25. The coding abbreviations used for the variables were as follows: "OCB" for organisational citizenship behaviour; "WFC" for work-FC; "FWC" for family-WC; "Support" for supervisory support; and "SE" for self-efficacy. Then, the data were screened for entry inaccuracies, outliers, and normality analysis.

4.3.1 Reverse Score Items

Some items in the questionnaires were in the negative-worded format. Items with negative word and corresponding reverse-scored are used to avoid participants give response in less attention to the content of the item (Barnette, 2000). For instance, two

(2) items, SS2, and SS12, which represent supervisory support were in negative-worded with a reverse-score. Hence, the items were recoded using "re-code into same variable" function in SPSS.

4.3.2 Dealing with Missing Data

Missing data is a common problem in social science studies particularly the data obtained from a survey questionnaires approach (Hair et al., 2014). Missing data occur when respondents have uncooperative attitude and do not answer the items in a questionnaires survey. Several techniques can be adopted to deal with missing value in a set of data. One of the measures is to use the complete case approach in which only complete data will be used for analysis.

According to Hair et al., (2016), any observation with a missing value of more than 15 per cent is to be removed from the data set. Therefore in the present study, cases with a missing value of less than 5 per cent in the data were replaced by using the *mean replacement method* suggested by Hair et al. (2016). It is recommended that this method be utilised instead of case wise deletion to treat missing value data when the PLS-SEM approach is adopted for data analysis. Therefore, from the total of 714 questionnaires received from the respondents, twenty-three (23) questionnaires were found incomplete, and these incomplete questionnaires were discarded, leaving a remaining of 691 usable questionnaires deemed suitable for analysis.

4.3.3 Outliers

The presence of outliers is still an important issue for structural modelling (Rigdon, Ringle, & Sarstedt, 2010). According to Hair et al. (2014), outliers is defined as "an extreme response to a particular question or to all questions" (p. 59). The observation is considered outliers when it is substantially different from other observations (Sekaran & Bougie, 2016). Outliers can be originated from several causes, including procedural error, extraordinary event, extraordinary observation, and unique combination of values (Hair et al., 2014).

Basically, there are two types of outliers, namely univariate outliers and multivariate outliers. Univariate outliers are described as a score that is extreme on a single variable. In the analysis, univariate outliers were identified by using a standardised score, *z scores*. Any cases outside of the threshold value of ±3.29 is considered as potential outliers (Tabachnick & Fidell, 2014). Based on the analysis of standard residuals, a total of 67 cases were found to have fallen beyond a threshold value of ±3.29 and therefore were removed from the data, results with 624 cases.

Multivariate outliers refer to an extreme score on two or more variables. This can be measured by using Mahalonobis Distance (Mahal Distance) that can be evaluated by using the X^2 distribution value, $p < 0.001$, which indicates an inappropriate Mahalanobis distance (Tabachnick & Fidell, 2014). The outlier's analysis found six (6) cases that showed an MAH_1 value of less than 0.001, thus the need for them to be removed, leaving a total of 618 available cases.

4.3.4 Common Method Bias (CMB)

Method biases threaten the validity of conclusions about the relationship between variables being tested in a study (Nunnaly, 1978). According to Hair et al., (2014), common method bias is important for data collected from a survey-based research. Two types of approaches can be adopted to ensure that CMB is not an issue in a study: procedural and statistical approaches (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In the procedural approach, respondents are ensured of the anonymity and the confidentiality of the data. The questionnaire survey was written in simple and comprehensible language, and to ensure anonymity, the respondents were not required to give their names and other personal information. The respondents were also assured that their responses would be kept strictly confidential and that the information given will be used only for research purposes.

In terms of statistical approach, Harman's one-factor test was conducted to analyse the common method variance in this study as suggested by Podsakoff et al., (2003). A data set has an issue of CMB when the total of variance extracted score exceeds the 50 percent threshold. All the 56-items were tested by using the principal component factor analysis in the statistical software SPSS. The analysis result (Appendix E) shows that among the seven factors extracted, Factor 1 accounted for only 26.01 per cent of the variance, thus indicating that the common method variance was not a problem in this study.

4.3.5 Test of Nonresponse Bias

Nonresponse bias arises when there is a systematic difference from the response by actual respondents with those who refused to answer a questionnaire survey (Malhotra & Birks, 2007). In particular, bias means that the response of non-respondents has substantially changed the overall results if they had the chance to answer the questionnaire. Therefore, in this study, it was important to investigate and estimate a possible bias as a result of loss of information due to the respondents' not responding to the survey questionnaire.

In this study, nonresponse bias was examined by comparing the means of the first early response (n=156) received from the organisation with the late response (n=134) that answered the survey questionnaire. The analysis of independent sample t-test was used to compare the mean difference between the two groups of early response and late response for both predictors and criterion variables. Table 4.2 shows the result of the independent sample t-test analysis for the nonresponse bias.

The result of the independent sample t-test showed no statistically significant (p > 0.05) differences between the response of the early respondents and the late respondents on the four latent constructs included in the study. The result indicates that the data set used in this study is not biased on the response from the respondents of the study.

Table 4.2: Result of Independent Sample *t*-test of Non-Response Bias

| Variables | Group/Batch | *t*-test for Equality of Means | | | |
| | | t-value | p-value | 95% Confidence Interval of the difference | |
				Lower	Upper
Organisational citizenship behaviour	Early response	0.489	0.625	-0.0882	0.1466
	Late response				
Work-FC	Early response	0.893	0.372	-0.1307	0.3480
	Late response				
Family-WC	Early response	-0.065	0.948	-0.2388	0.2236
	Late response				
Supervisory support	Early response	1.268	0.206	-0.0446	0.2060
	Late response				
Self-efficacy	Early response	-0.376	0.708	-0.1643	0.1116
	Late response				

Note: n = 156 (Early response); n = 134 (late response); p < 0.05, Sig. based on 2-tailed; Confidence intervals containing zero (negative lower bound) are interpreted as not significant

4.3.6 Normality Assumption

Normality refers to the data distribution of sample data that correspond to normal distribution (Hair et al., 2014). The normality distribution can be measured by using the Skewness and Kurtosis test as well as the Kolmogorov and Shapiro Method (Saunders et al., 2009; Tabachnick & Fidell, 2014). Skewness is used to describe the balance of distribution in symmetrical while kurtosis is describes the distribution peak (Hair et al., 2014). The normality test for skewness and kurtosis can be measured by using the *z* value. If the *z* value ratio exceeds the critical value ± 1.96 with significant level of 0.05, then the data is not normal (Hair et al., 2014).

Table 4.3: Test of Normality (Skewness and Kurtosis)

Variables	N	Skewness			Kurtosis		
		Skewness	Std. Error	*z* value	Kurtosis	Std. Error	*z* value
OCB	618	-0.645	0.098	-6.581	1.102	0.196	5.622
Work-FC	618	0.063	0.098	0.642	-0.844	0.196	-4.306
Family-WC	618	0.352	0.098	3.591	-0.838	0.196	-4.275
Supervisory support	618	-0.673	0.098	-6.867	0.429	0.196	2.188
Self-efficacy	618	-0.758	0.098	-7.734	1.195	0.196	6.096

Table 4.3 shows the ratio of skewness is shown with a *z* value greater than ± 1.96 except for work-FC. Similarly, the value of ratio for kurtosis also records a *z* value greater than ± 1.96. Therefore, it can be concluded that the assumption of normality test on the data of this study is not normally distributed.

The normality of the data was also tested using Kolmogorov-Smirnov and Shapiro-Wilk test. When the analysis showed a significant level ($p < 0.05$), then the distribution is nonnormal. As shown in Table 4.4, all the variables record a significant level of $p < 0.05$ thus indicating that the data is not normally distributed.

Table 4.4: Tests of Normality (Kolmogorov-Smirnov and Shapiro-Wilk)

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
OCB	0.105	618	<0.01	0.964	618	<0.01
Work-FC	0.071	618	<0.01	0.98	618	<0.01
Family-WC	0.088	618	<0.01	0.961	618	<0.01
Supervisory support	0.127	618	<0.01	0.964	618	<0.01
Self-efficacy	0.155	618	<0.01	0.938	618	<0.01

4.4   Preliminary Analysis

4.4.1 Descriptive Statistics

Descriptive statistics are related to the demography of respondents and the descriptive analysis of the variables. All of the demographic variables of this study are described by frequency and percentage distributions. In this study, descriptive analysis was performed in terms with of means, standard deviations, frequency, percentage, reliability coefficient and correlations. All of the analyses were performed by using SPSS (version 25.0, SPSS Inc. 2017).

4.4.2 Demographic Characteristics

The following seven demographic profiles were included in the questionnaire: gender, age, race, marital status, education level, tenure in the organisation, and grade position. Table 4.5 shows that majority of the respondents are female (61.0 %) and the rest are male (39.0%). Most of the respondents aged between 30 and 39 years (58.7%) followed by 40 and 49 years (26.1%) and 20 and 29 years (12.8%). The least number of respondents aged 50 years and above (2.4%).

In terms of ethnicity, most of the respondents are Malay (87.9%), followed by Chinese (6.1%), Indian (5.0%), and other races (1.0%). In terms of marital status, majority of the respondents are married (74.1%) and the rest are single (22.5%), divorced (2.1%), separated (1.0%), and widowed (0.3%). It is also revealed that most of the respondents are bachelor's degree holders (64.7%), followed by master's degree holders (33.5%). Only 1.8 per cent of the respondent's are educated with doctorate level.

Regarding the tenure in current organisation, most of the respondents have been working for around 6 to 9 years (34.6%) followed by the those who have been working for more than 10 years (33.2%). Only 20.9 per cent of the respondents have been working for 3 to 5 years, and only 11.3 per cent of the respondents have been working for less than 2 years. In terms of grade of position, most of them are working under grade M44 (36.6%), followed by M48 (30.1%), M41 (21.8%), M52 (7.0%), and M54 (4.5%).

Table 4.5: Demographic profile of the respondents (n=618)

Demographic	Category	Frequency	Percentage (%)
Gender	Male	241	39.0
	Female	377	61.0
Age	20 - 29	79	12.8
	30 - 39	363	58.7
	40 - 49	161	26.1
	50 years and above	15	2.4
Race	Malay	543	87.9
	Chinese	38	6.1
	Indian	31	5.0
	Others	6	1.0
Marital Status	Single	139	22.5
	Married	458	74.1
	Separated	6	1.0
	Divorced	13	2.1
	Widowed	2	0.3
Education	Bachelor Degree	400	64.7
	Master Degree	207	33.5
	PhD	11	1.8
Tenure	1 - 2 years	70	11.3
	3 - 5 years	129	20.9
	6 - 9 years	214	34.6
	10 years and above	205	33.2
Grade	M41	135	21.8
	M44	226	36.6
	M48	186	30.1
	M52	43	7.0
	M54	28	4.5

4.4.3 Descriptive Analysis

Next, descriptive statistics were derived to obtain the mean, standard deviations, and Pearson's correlation test for the variables included in this study. The analysis was conducted by using statistical analysis software SPSS (version 25.0, SPSS Inc. 2017).

Table 4.6: Mean score and standard deviation of the variables

Variables	Mean	Std. Deviation
OCB	4.663	0.514
Work-FC	3.378	1.073
Family-WC	3.003	1.108
Supervisory support	4.436	0.553
Self-efficacy	4.756	0.597

Based on the descriptive statistics in Table 4.6, self-efficacy has the highest mean score ($\mu = 4.756$) followed by OCB ($\mu = 4.663$) and supervisory support ($\mu = 4.436$). Work-FC has a mean score of $\mu = 3.378$ and the lowest mean score is family-WC with $\mu = 3.00$. In addition, OCB has the lowest standard deviation (SD = 0.514) and Family-WC has the highest standard deviation (SD=1.10) among other variables such as work-FC (SD = 1.07), supervisory support (SD = 0.55) and self-efficacy (SD = 0.59).

4.4.4 Pearson's Correlation Analysis

The Pearson's correlation analysis results show a negative correlation between work-family conflict (r = -0.113**), family-work conflict (r = -0.239**), and self-efficacy. In contrast, supervisory support has a positive correlation with self-efficacy (r = 0.513**). It was also found that work-FC does not have a relationship with OCB (r = -0.075, p > 0.05) while family-WC has a negative relationship with OCB (r = -0.209**).

As for self-efficacy, the variable has a higher positive relationship with OCB (r = 0.577**). All these correlations are significant at a *p* value of less than 0.01. The result of Pearson's correlation is shown in Table 4.7.

Table 4.7: Results of Pearson's correlation

Variables	OCB	Work-FC	Family-WC	Supervisory support	Self-efficacy
OCB	1				
Work-FC	-0.075	1			
Family-WC	-0.209**	0.727**	1		
Supervisory support	0.523**	0.043	-0.015	1	
Self-efficacy	0.577**	-0.113**	-0.239**	0.513**	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

4.4.5 Multicollinearity

Multicollinearity represents the degree of variables effect that can be predicted by other variables in the analysis (Hair et al., 2014). Multicollinearity is described as the problem between independent variables that are highly correlated between each other. For instance, variables are considered highly correlated when the value of correlation is above 0.90 (Tabachnick & Fidell, 2014).

It is important to analyse multicollinearity to ensure that no multicollinearity exists among the predictor variables in the study. Two common measures can be measured to identify the existence of multicollinearity among the variables: (1) tolerance value and (2) variance inflation factor (VIF). The VIF value can be obtained by inverting the value of tolerance. According to Sekaran and Bougie (2016), the common cut off value for tolerance value is 0.10, which corresponds to VIF of 10. Hair et al. (2014) also proposed multicollinearity measure in the context of PLS-SEM with a tolerance value of 0.20 or lower and a VIF value of higher than 5 indicates a potential collinearity problem.

Table 4.8 shows the values for Tolerance and VIF for all the variables. The tolerance value for the independent variables are greater than the cut-off point of 0.10 and the value for VIF is less than 10. Therefore, the variables fulfil the minimum requirement as suggested by Hair et al. (2014). It can be concluded that there is multicollinearity problem among the variables in the study.

Table 4.8: Results of multicollinearity based on Tolerance and VIF values

Variables	Self-efficacy		OCB	
	Tolerance	VIF	Tolerance	VIF
Work-FC	0.45	2.208	0.45	2.214
Family-WC	0.45	2.222	0.43	2.305
Self-efficacy	-	-	0.68	1.455
Supervisory support	0.98	1.011	0.72	1.382

Note: OCB and self-efficacy as dependent variable

4.5   Structural Equation Modelling: Partial Least Square (PLS – SEM)

As mentioned in Chapter 3, PLS-SEM was applied to test the research hypotheses for this study. The process began by validating the measurement model and structural model followed by path analysis with a mediator variable, as shown in the research model. The measurement model reliability was first evaluated by using composite reliability. Then, construct validity and discriminant validity analyses were performed to evaluate the validity of the model. Next, the structural model was evaluated using a path analysis to examine the relationships and mediation effect based on the research hypotheses addressed in this study.

4.5.1 Measurement Model

The first part of the analysis is to analyse the measurement model on all of the variables in the study. To assess the measurement model, the analysis of internal consistency was measured to derive a composite reliability value. Then, analysis of construct validity was conducted for the measurement model evaluation; the construct validity comprises convergent validity (outer loadings and average variance extracted (AVE)), and discriminant validity (Fornell Larcker criterion and Heterotrait-monotrait (HTMT) ratio) were conducted for the measurement model evaluation. Figure 4.1 in the following section shows the measurement model to be analysed in this study.
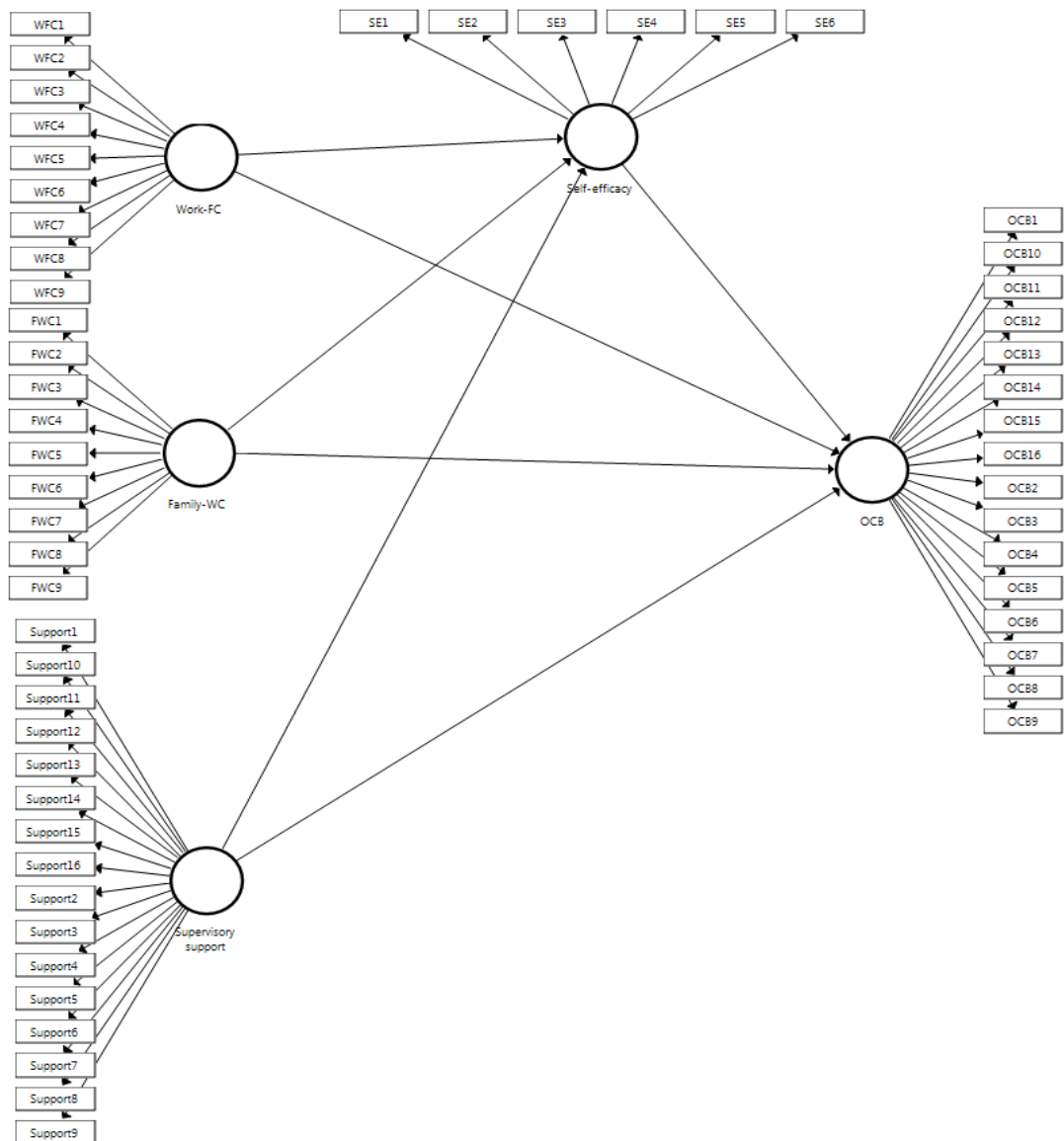
Figure 4.1: The Measurement model

4.5.1.1 Composite Reliability

Based on Sekaran and Bougie's (2016) definition, reliability refers to the consistency of the measurement across various items in the instrument. In the analysis, composite reliability was utilised to measure the reliability of the construct. Composite reliability does not assume that all indicators are equally reliable but rather prioritises indicators according to their individual reliability during model estimation (Hair et al., 2016). Thus, the test for composite reliability in this study included the different outer loading of the indicator.

Table 4.9: Composite reliability and average variance extracted (AVE)

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Family-WC	0.961	0.967	0.763
OCB	0.895	0.914	0.516
Self-efficacy	0.889	0.915	0.643
Supervisory Support	0.939	0.947	0.559
Work-FC	0.953	0.956	0.708

According to Hair et al. (2014), a composite reliability value between 0.60 and 0.70 is acceptable, and a value above 0.70 s considered satisfactory. As shown in Table 4.9, all the constructs indicate a satisfactory composite reliability with a value above 0.70.

Alternatively, the Cronbach's alpha coefficient was also applied to measure the internal consistency of the constructs. According to Hair et al. (2016), the value of Cronbach's alpha above 0.70 is considered acceptable and highly reliable. Therefore, the result of reliability analysis in Table 4.9 indicates that the items used to represent the constructs have satisfactory internal consistency reliability.

Next, construct validity is described as the validity and suitability of the measurement to obtain results to test the intended theory (Sekaran & Bougie, 2016). Specifically, the items of a construct must measure the construct they are supposed to measure. In the analysis, construct validity was examined through convergent validity and discriminant validity, explained in the following subsection.

4.5.1.2 Convergent Validity

The convergent validity describes a measure that correlates with an alternatives measures of the same construct (Hair et al., 2016). Convergent validity can be measured by using the average variance extracted (AVE) value and the outer loadings value of the indicators. The common rule of thumb for outer loading is above 0.7. In contrast, an outer loading value of less than 0.4 should be deleted, and values within 0.40 to 0.7 will be considered to be removed if the deletion will increase the low AVE value. Hence, an AVE value greater than 0.5 is desirable for convergent validity (Hair, Black, Babin, & Anderson, 2010). However, an AVE value of less than 0.5 indicates more variance in indicators on average for the latent construct.

Based on the measurement model evaluation for the initial model (Appendix C), it is found that the AVE value for OCB and supervisory support construct are less than 0.5, which indicates an inadequate convergent validity. Therefore, any item with a factor loading of less than 0.4 was deleted to increase the AVE value in order to achieve an adequate convergent validity. Therefore, item OCB1, support2, and support12 were removed because their outer loading values were less than 0.40.
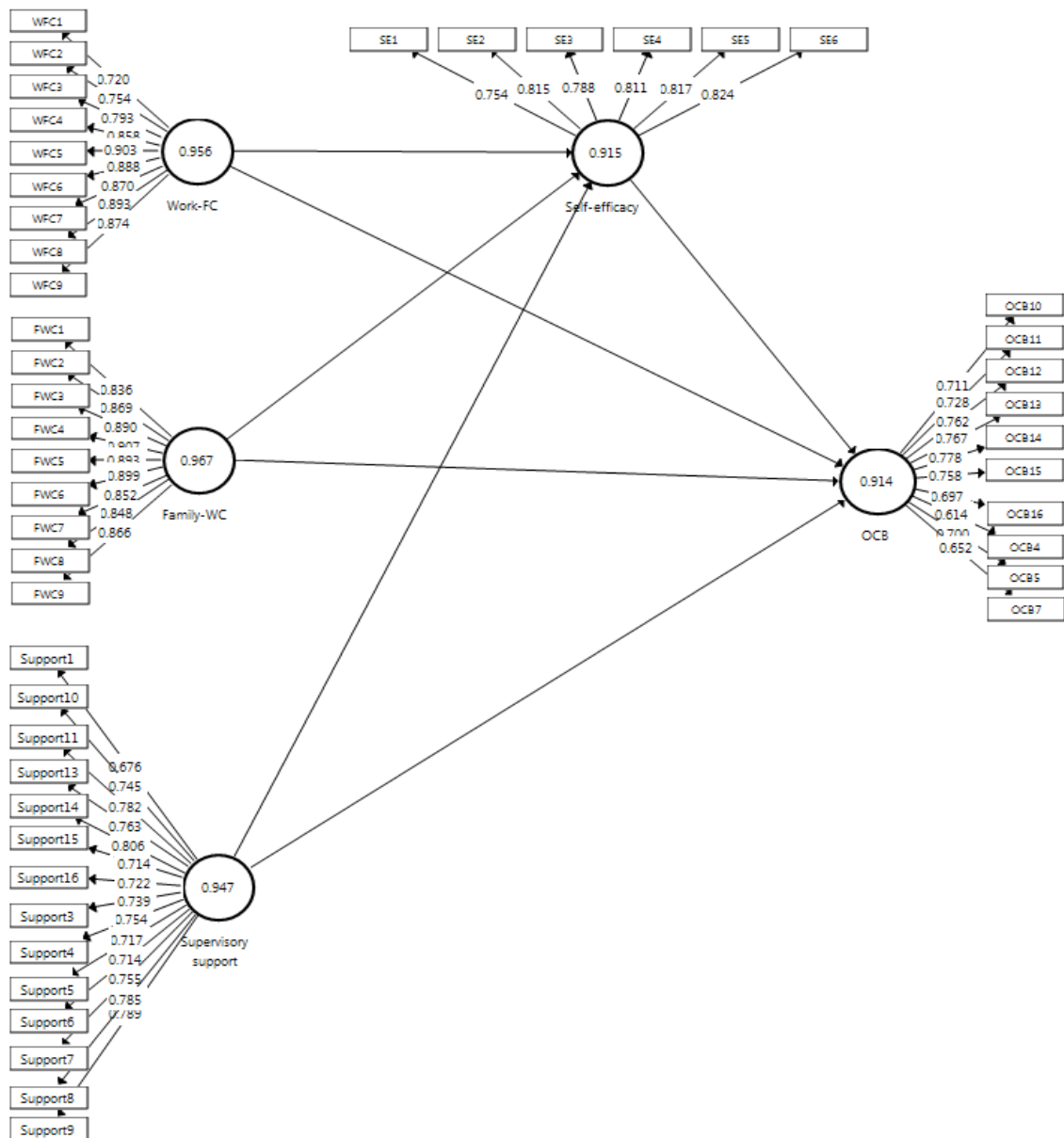
Figure 4.2: Composite reliability and factor loadings values

After the deletion of items with loading less than 0.40, the initial model was re-analysed and it was found that the AVE value of OCB is still less than 0.50. Therefore, any items under the OCB construct with an AVE value within the range of 0.40 to 0.70 were omitted if the deletion contributed to greater increase in the AVE value of the OCB construct (Hair et al., 2014). Consequently, items OCB2, OCB3, OCB6, OCB8, and OCB9 were deleted because they increased the value of AVE for the OCB construct to 0.516. Other items that were maintained indicate acceptable convergent validity. Results of the outer loading and AVE values for modified model are provided in Appendix D.

4.5.1.3 Discriminant Validity

Discriminant validity refers to the actual differences of a construct with other constructs in a model. It proposes that the measure of a construct is different from the measure of another construct in a model (Fernandes, 2012). Discriminant validity also indicates that a construct has a distinct variance with its own indicators compared to other constructs. Discriminant validity can be tested by evaluating a construct's squared AVE value against correlation with all other constructs in a model. Hence, a construct will have an adequate discriminant validity when its AVE value exceeds the correlation of other constructs (Fornell et al., 1981; Hair et al., 2016).

The following tables shows the results of discriminant validity based on Fornell-Larcker criterion and Heterotrait-monotrait (HTMT) ratio analyses. As shown in Table 4.10, the AVE square root for all the variables is higher than the others when compared diagonally with other construct. Hence, discriminant validity is established for all of the constructs.

Table 4.10: Discriminant validity based on Fornell-Larcker Criterion

Variables	OCB	Self-efficacy	Supervisory support	Work-FC	family-WC
OCB	**0.719**				
Self-efficacy	0.589	**0.802**			
Supervisory support	0.519	0.525	**0.748**		
Work-FC	-0.118	-0.141	-0.064	**0.842**	
family-WC	-0.25	-0.241	-0.103	0.74	**0.874**

The second method for assessing discriminant validity is HTMT ratio test. According to Henseler et al. (2015), the HTMT ratio should be less than the threshold value of 0.85 (Kline, 2011). As indicated from the HTMT ratio results (Table 4.11), the

values of HTMT ratio for all the variables are less than 0.85, thus indicating that all the variables are of appropriate discriminant validity.

Table 4.11: Discriminant validity based on Heterotrait-monotrait ratio (HTMT)

Variables	Family-WC	OCB	Self-efficacy	Supervisory support
OCB	0.263			
Self-efficacy	0.258	0.658		
Supervisory support	0.111	0.56	0.569	
Work-FC	0.76	0.108	0.127	0.072

Alternatively, discriminant validity can be assessed by using cross-loadings. As noted in Appendix B, the discriminant validity is established since the constructs loading is higher than all of the cross-loadings with other constructs. For instance, item *SE6* has the highest loading value with its corresponding construct, *self-efficacy* (0.824), while the loading of other constructs is lower (for example, SE6 on OCB: 0.475). The findings are similar with the other indicator of constructs accordingly. Therefore, the Fornell-Larcker criterion, HTMT ratio, and cross loading assessment provide evidence of appropriate discriminant validity.

4.5.2 Structural Model

The structural model were measured using the assessment of coefficient of determination (R^2), significance of path coefficients, effect size (f^2),and predictive relevance (Q^2) (Hair et al., 2016). Coefficient of determination R^2 is described as the measure of variance of proportion for the mean of endogenous variable that is explained by exogenous variables (Hair et al., 2014). A higher R^2 value illustrates an explanatory power of the regression between an exogenous construct and an endogenous construct.

Then, the effect size (f^2) of the model was measured: 0.02 to 0.15 indicates small effects; 0.15 to 0.35 indicates medium effects; and more than 0.35 indicates large effects. Hence, the value of less than 0.02 denotes no effect between the variables (Hair et al., 2016). Predictive relevance (Q^2) was measured using a blindfolding approach and a Q^2 value of more than zero ($Q^2 > 0$) indicates a predictive relevance. The following section reports the results of the analyses of each assessment.

4.5.2.1 Coefficient of Determination (R^2)

The coefficient of determination of R^2 represents the combined effect of exogenous construct towards a latent endogenous construct. Thus, an endogenous construct is explained by the coefficient variance from all the exogenous constructs. As a rule of thumb recommended by Hair et al. (2016), R^2 values of above 0.75 are considered substantial, 0.50 considered moderate, and 0.25 considered a weak level of predictive accuracy.

As shown in Table 4.12, the R^2 value of 0.426 indicates that work-FC, family-WC, and supervisory support explains 42.6 per cent of the variance in OCB. The adjusted R^2 value is 0.423. On the other hand, the R^2 value for self-efficacy is 31.3 per cent of the exogenous variables with an adjusted R^2 value of 0.310. Therefore, it can be concluded that the exogenous variable value of R^2 on the target constructs of OCB and self-efficacy is weak.

Table 4.12: Coefficient of determination (R^2)

Variables	R^2	R^2 Adjusted
OCB	0.426	0.423
Self-efficacy	0.313	0.310

The coefficient of determination (adjusted R^2) is used to avoid bias in the model by modifying the number of exogenous constructs relative to the sample size (Hair et al., 2014). The adjusted R^2 involves comparing original model with extended model with a different number of exogenous variables with a different sample size. As a result, the adjusted R^2 value was reduced when compared with the regular R^2 due to the different numbers of construct and sample sizes. Figure 4.3 shows the coefficient of determination (R^2) for the model.
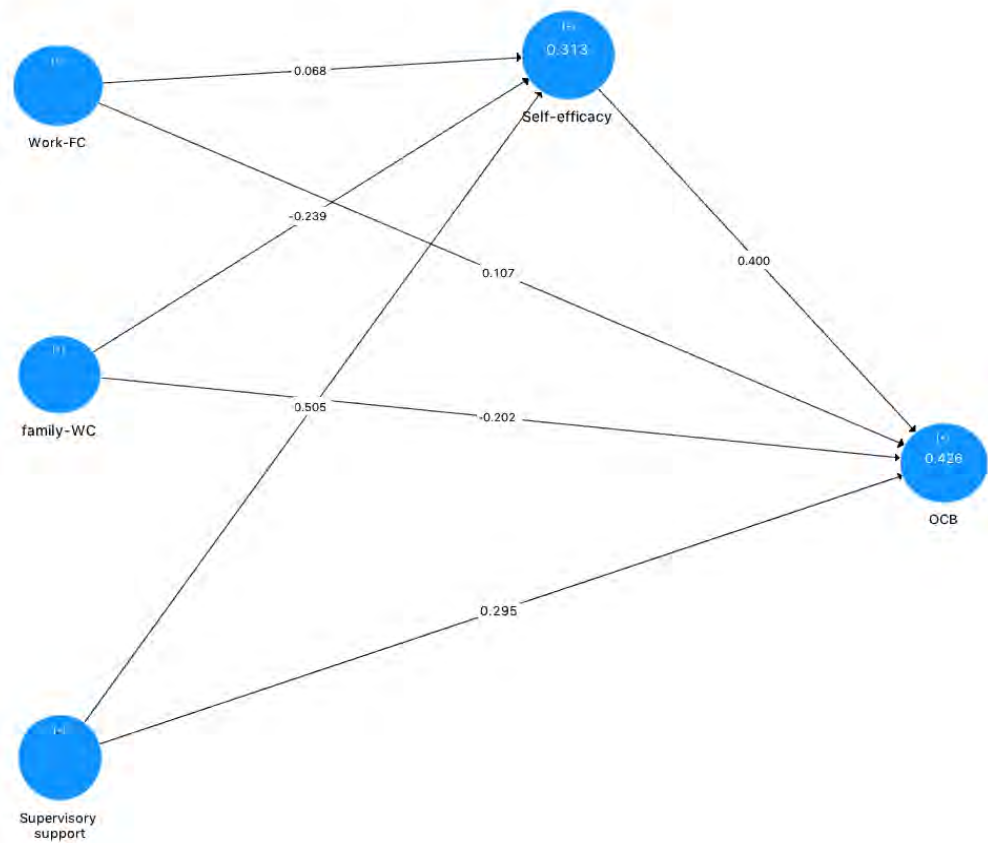
Figure 4.3: The coefficient of determination (R^2)

In this study, the differences between R^2 value and adjusted R^2 value were very small for OCB (0.426 - 0.423) and self-efficacy (0.313 - 0.310) with 0.003 and 0.003 differences, respectively. The reduction of constructs and sample size in the extended model was due to the nonsignificant path coefficient among the constructs, which resulted

in a lower value of adjusted R^2. Therefore, the original model is preferable since the differences of R^2 value with the adjusted R^2 are not very pronounced (Hair et al., 2016).

4.5.2.2 Effect Size (f^2)

The effect size (f^2) assesses the magnitude of contribution of exogenous variables to endogenous variables based on an R^2 value. Based on the rule of thumb by Hair et al. (2016), an effect size of 0.02 is considered small; 0.15 is considered medium; and 0.35 and above is considered a large effect towards an endogenous variable. Hence, an effect size of less than 0.02 indicates that there is no effect. Table 4.13 shows that work-FC (f^2 = 0.009) has a small effect on OCB. Hence, family-WC also has a small effect size towards OCB with f^2 = 0.031. Supervisory support has a medium effect on OCB with an effect size (f^2) value of 0.110. Self-efficacy also has a medium effect size towards OCB with an f^2 value of 0.192.

On the other hand, work-FC (f^2 = 0.003) has no effect on self-efficacy because the value of f^2 is less than 0.02 (Hair et al., 2016). Conversely, family-WC has a small effect on self-efficacy (f^2 = 0.037) while supervisory support has a large effect on self-efficacy (f^2 = 0.367). The effect sizes (f^2) of the variables are shown in Table 4.13.

Table 4.13: Effect size (f^2)

Variables	f^2	Effect size
Work-FC → OCB	0.009	No effect
Family-WC → OCB	0.031	Small
Supervisory support → OCB	0.110	Small
Self-efficacy → OCB	0.192	Medium
Work-FC → Self-efficacy	0.003	No effect
Family-WC → Self-efficacy	0.037	Small
Supervisory support → Self-efficacy	0.367	Large

4.5.2.3 Predictive Relevance (Q^2)

The predictive accuracy of the endogenous variable was evaluated by using the Stone-Geisser's Q^2 value (Geisser, 1974; Stone, 1974 as cited in Hair et al., 2016). The predictive relevance value postulates that the model accurately predicts data not used in a model estimation (Hair et al., 2016). A Q^2 value larger than zero in a structural model indicates a predictive relevance for an endogenous variable. As shown in Table 4.14, the values of Q^2 for OCB (0.203) and self-efficacy (0.187) are greater than zero thus indicating an appropriate predictive relevance.

Table 4.14: Predictive relevance (Q^2)

Variables	Q^2
OCB	0.203
Self-efficacy	0.187

4.5.3 Path Model

Path analysis or also known as path model in PLS-SEM examines the relationship between latent variables in a model. Path analysis is a statistical method based on linear regression to test the direct effect of independent variables towards dependent variable and the indirect effect of variables via a mediator in the model. In the framework of structural equation system, the mediation analysis divides the correlation into three effects (Baron & Kenny, 1986; Hayes & Preacher, 2014):

(a) Direct effects of independent variable on dependent variable.

(b) Indirect effect of a variable on dependent variable via its effect on another variable or other variable.

(c)   Total effects that is the sum of direct and indirect effects.

A structural model evaluation is the subsequent step of SEM after a measurement model is validated. The structural model can be applied to examine the relationship between exogenous variables and endogenous variables (Hair et al., 2014). The structural model is evaluated by examining the overall model fit followed by estimating the size, direction, and significance of the hypothesised parameter (Hair et al., 2016).

4.5.3.1 Path Analysis: without Mediator

The first model deals with the influence of endogenous variables including work-FC, family-WC, and supervisory support. This model was evaluated on OCB. As shown in Figure 4.4, the path analysis does not include self-efficacy as a mediator in the model.
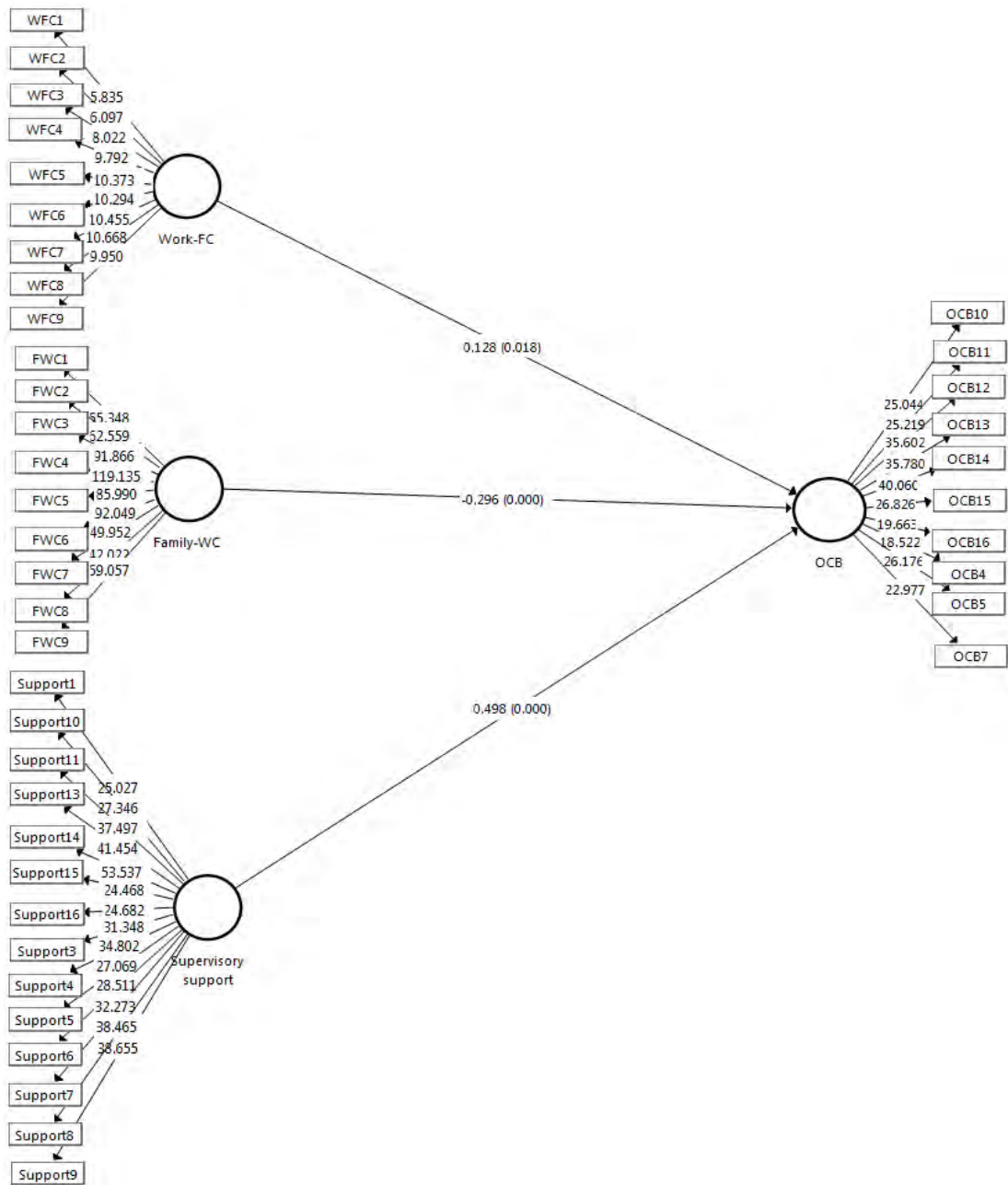
Figure 4.4: Path analysis without mediator

Table 4.15 shows the result of the bootstrapping technique of the direct path without the mediator. The table illustrates the *p* value for each path between the variables. In the structural model, the three components of exogenous variable including work-FC, family-WC, and supervisory support have a meaningful relationship with the endogenous variable of OCB by assuming that the *p* value is less than 0.05 (p < 0.05).

It is shown that the effect of work-FC on OCB was positive and significant (β = 0.128, t = 2.358, p < 0.05). On the other hand, family-WC negatively affects OCB (β = -0.296, t = 5.327, p < 0.01). The third factor involves supervisory support and shows a positive and significant relation with OCB (β = 0.498, t = 15.237, p < 0.01).

Table 4.15: Path analysis using bootstrapping approach (without mediator)

Path	Original Sample (β)	SE	t value	p value
Family-WC → OCB	-0.296**	0.055	5.327	< 0.01
Supervisory support → OCB	0.498**	0.033	15.237	< 0.01
Work-FC → OCB	0.128*	0.054	2.358	0.018

** Significant at 0.01 level
* Significant at 0.05 level

4.5.3.2 Path Analysis: with Mediators

The research framework also includes a mediator variable other than an analysis of the direct relationship between the exogenous and endogenous variables. Therefore, it is possible to analyse the direct effect between each other and the indirect effect of mediator in the structural mode. Figure 4.5 shows the structural model with the mediator of the study.
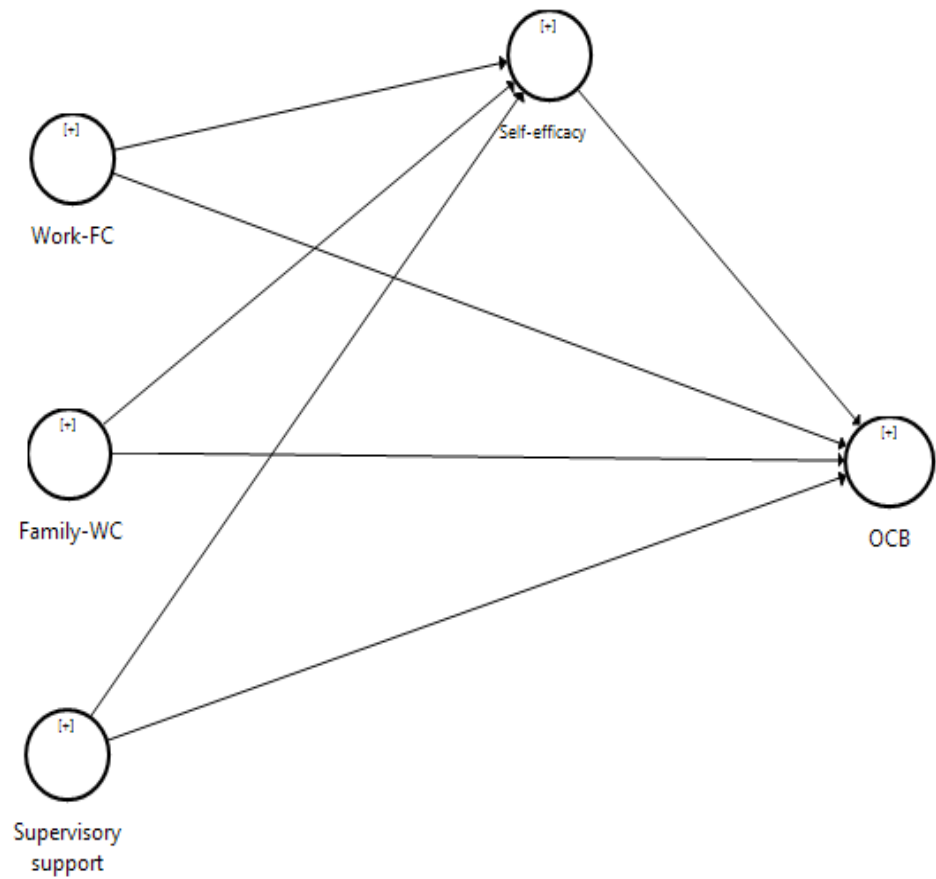
Figure 4.5: Structural model

The bootstrapping techniques (Hayes & Preacher, 2014) were employed to assess the structural model. Based on the recommendation by Preacher and Hayes (2008), a large number of 5000 subsamples was drawn to derive a standard error of the estimates and assess each indicators weight using *t* values calculation (Hair et al., 2014). The result of the bootstrapping approach with mediator is shown in Table 4.16.

Table 4.16: Path analysis using the Bootstrapping approach (with mediator)

Path	β	SE	t value	p value
Path a				
Work-FC → Self-efficacy	0.068	0.047	1.451	0.147
Family-WC → Self-efficacy	-0.239**	0.048	5.01	< 0.01
Supervisory support → Self-efficacy	0.505**	0.034	14.823	< 0.01
Path b				
Self-efficacy → OCB	0.40**	0.047	8.551	< 0.01
Path c'				
Work-FC → OCB	0.107*	0.05	2.141	0.032
Family-WC → OCB	-0.202**	0.047	4.324	< 0.01
Supervisory support → OCB	0.295**	0.043	6.923	< 0.01

** Significant at 0.01 level
* Significant at 0.05 level

As shown in Table 4.16, the path analysis shows that the effect of work-FC (β = 0.107, t = 2.141, p < 0.05) and supervisory support (β = 0.295, t = 6.923, p < 0.01) were all significant and positively influence OCB. In contrast, family-WC were found to have a negative significant effect on OCB (β = -0.202, t = 4.324, p < 0.01).

Moreover, the relationship between work-FC and self-efficacy is not significant (β = 0.068, t = 1.451, p > 0.05) with a *t* value is of than 1.96. Interestingly, family-WC shows a negative significant relationship with self-efficacy (β = -0.239, t = 5.01, p < 0.01). In addition, supervisory support positively and significantly related with self-efficacy with β = 0.505 with a *t* value greater than 1.96 (t = 14.823) and a *p* value less than 0.01 (p < 0.01). Lastly, it is found that self-efficacy also has a positive significant relationship with OCB (β = 0.40, t = 8.551, p < 0.01).

4.5.3.3 Mediation Analysis

Figure 4.6 shows the path modelling for structural model evaluation.
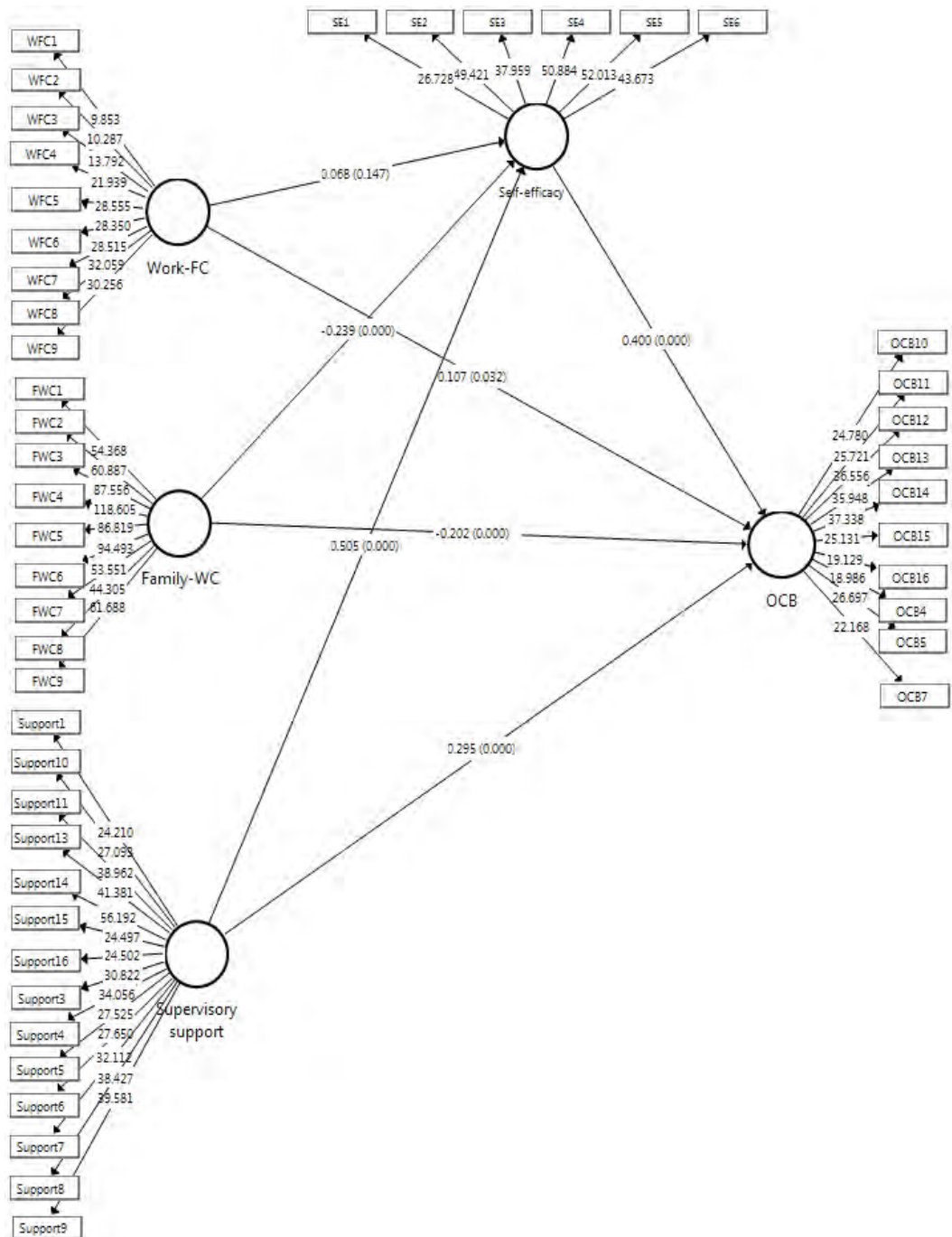
Figure 4.6: Path model including self-efficacy as mediator

The mediation test results (Table 4.17) indicates that the mediation effect of self-efficacy between the relationship of family-FC and OCB is negatively significant (β = -0.095, t = 4.338, p < 0.01). Hence, supervisory support is shown to have a positive significant relationship on OCB with self-efficacy as the mediating variable (β = 0.202, t = 6.868, p < 0.01). On the other hand, the relationship between work-FC and OCB with self-efficacy as the mediator appears to be statistically nonsignificant with the p value being greater than 0.05 (β = 0.027, t = 1.439, p > 0.05).

Table 4.17: Test of mediation effect (indirect) of self-efficacy using bootstrapping

Path	"ab" (indirect effect) (β)	SE	t value	p value
Work-FC → Self-efficacy → OCB	0.027	0.019	1.439	0.150
Family-WC → Self-efficacy → OCB	-0.095**	0.022	4.338	< 0.01
Supervisory support → Self-efficacy → OCB	0.202**	0.029	6.868	< 0.01

** Significant at 0.01 level
* Significant at 0.05 level

Following the mediation analysis result in Table 4.18, this study concludes that self-efficacy is a nonmediation between work-FC and OCB relationship. It indicates that work-FC has a direct-only relationship with OCB since only the direct effect shows a significant relationship, but not indirect effect (β = 0.107*, β = 0.027). Interestingly, self-efficacy indicates as complementary mediation on the relationship between family-WC and OCB whereas both the direct effect and indirect effect show a significant negative value (β = -0.202**, β = -0.095**). On the other hand, the direct effect and indirect effect of the relationship between supervisory support and OCB are both positive and significant (β = 0.295**, β = 0.202**). Therefore, it can be concluded that self-efficacy is considered

a complementary mediator of the relationship between supervisory support and OCB (Hair et al., 2016).

Table 4.18: Mediation analysis

Path	Direct effect (β)	Indirect effect (β)	Results
Work-FC → OCB	0.107*	0.027	Direct-only non-mediation
Family-WC → OCB	-0.202**	-0.095**	Complementary mediation
Supervisory support → OCB	0.295**	0.202**	Complementary mediation

* Significant at 0.05 level
** Significant at 0.01 level

4.6 Hypotheses Testing

Based on the structural model, there are 10 research hypotheses that needed to be tested. Hypotheses 1a, 2a, and 3a suggest a relationship between work-FC, family-FC, and supervisory support and OCB; hypotheses 1b, 2b, and 3b denote the relationship between work-FC, family-WC, supervisory support, and self-efficacy. As for hypotheses 1c, 2c and 3c, they concern the mediating effect of self-efficacy on the relationship between work-FC, family-WC, and supervisory support on OCB. Hypothesis 4 concerns the relationship between self-efficacy and OCB.

The research hypotheses were evaluated using the standard regression weight in the structural model. For instance, the structural model evaluation were done based on the path analysis value of t statistics (t-value) from path coefficient table with a threshold value of is above 1.96 at a significant level p-value of 0.05 ($p < 0.05$) (Hair et al., 2014).

Hypothesis 1a: The first hypothesis suggests that work-FC has no significant relationship with OCB. On the contrary, the result of the analysis shows a positive

significant relationship between work-FC and OCB. Specifically, for the direct relationship analysis, work-FC shows a beta value β of 0.107, a t-value of 2.141, and a p-value of less than 0.05 ($p < 0.05$). This indicates that work-FC has a positive effect on employees OCB. Therefore, hypothesis 1a is not supported. Hence, it can be concluded that work-FC has a positive effect on employees OCB.

Hypothesis 1b: Hypothesis 1b denotes that work-FC has no significant relationship with self-efficacy. The path analysis result (Table 4.16) shows a beta value β of 0.068 with a t-value of less than 1.96 (t = 1.451), and a p-value above 0.05 (p > 0.05). This finding indicates that work-FC has no significant relationship with self-efficacy and therefore, hypothesis 1b is supported. It can be concluded therefore that work-FC has no influence on an employee's self-efficacy.

Hypothesis 1c: Hypothesis 1c suggests that self-efficacy mediates the relationship between work-FC and OCB. As shown in Table 4.17, the result of the indirect path analysis found out no significant relationship between work-FC and OCB through self-efficacy. Specifically, self-efficacy does not mediate the relationship between work-FC and OCB since the t-value is less than 1.96 and the p-value is above 0.05 (β = 0.027, t = 1.439 with p > 0.05). Hence, hypothesis 1c is not supported. In conclusion, self-efficacy is not a mediator and there is only a direct relationship between work-FC and OCB.

Hypothesis 2a: Hypothesis 2a denotes there is no relationship between family-WC and OCB. The path analysis result in Table 4.16 shows that a beta value β of -0.202 with a t-value of 4.324 and a p-value of less than 0.01 (p < 0.01). The result shows that family-WC has a negative significant relationship with OCB. Accordingly, it can be concluded

that family-WC has a negative influence on employees OCB and therefore, hypothesis 2a is not supported.

Hypothesis 2b: This hypothesis 2b states that there is no significant relationship between family-WC and self-efficacy. As shown in Table 4.16, the beta value β is -0.239 with a *t* value of 5.01 and a p-value of less than 0.01 ($p < 0.01$). This indicates that family-WC has a negative significant relationship with self-efficacy. Hence, hypothesis 2b is not supported.

Hypothesis 2c: Hypothesis 2c suggests the mediating effect of self-efficacy between the relationship of family-WC and OCB. Finding from the analysis indicates that self-efficacy mediates the relationship between family-WC and OCB with a beta value of $β = -0.095$, a *t* value above 1.96 (t = 4.338), and a p-value of less than 0.01 ($p < 0.01$). In particular, self-efficacy is considered as a complementary mediator on those linkages (Hair et al., 2016). Therefore, hypothesis 2c is supported.

Hypothesis 3a: In addition, the next hypothesis 3a mentions the relationship between supervisory support and OCB. It is hypothesised that supervisory support has no significant relationship with OCB. Based on the analysis, the result found that supervisory support has a positive significant relationship with OCB. Specifically, the result shows that the beta value β is 0.295 with a t-value of 6.923 and a p-value of less than 0.01 ($p < 0.01$) thus indicating a significant relationship. Therefore, it can be concluded that supervisory support has a positive impact on employees OCB, and therefore, hypothesis 3a is not supported.

Hypothesis 3b: Hypothesis 3b suggests the relationship between supervisory support and self-efficacy. It is assumed that supervisory support has no significant relationship with self-efficacy. Based on the analysis, it is found that the beta value β is 0.505 and the t-value is above the threshold value of 1.96 (t = 14.823) and the p-value is less than 0.01 (p < 0.01). The result indicates that supervisory support has a positive significant relationship with self-efficacy as shown in Table 4.16. Hence, hypothesis 3b is not supported.

Hypothesis 3c: This hypothesis seeks the mediating effect of self-efficacy on the relationship between supervisory support and OCB. As shown in Table 4.17, the beta value β is 0.202 with a t-value of 6.868 and the result of the p-value is less than 0.01 (p < 0.01). Therefore, it can be concluded that self-efficacy partially mediates the relationship between supervisory support and OCB. Hence, hypothesis 3c is supported.

Hypothesis 4: Lastly, hypothesis 4 proposes that self-efficacy has no significant relationship with OCB. The path analysis result (Table 4.16) indicates that the beta value β is 0.40 with a t-value of 8.551 and a p-value of less than 0.01 (p < 0.01). This finding concludes that self-efficacy has a positive significant relationship with OCB and therefore, hypothesis 4 is not supported.

Results from the research hypotheses testing are summarised in Table 4.19 as follows:

Table 4.19: Research hypotheses results

	Hypotheses statement	Results
H1	1a: There is no significant relationship between work-FC and OCB.	Not supported
	1b: There is no significant relationship between work-FC and Self-efficacy.	Supported
	1c: Self-efficacy mediates the relationship between work-FC and OCB.	Not supported
H2	2a: There is no significant relationship between family-WC and OCB.	Not supported
	2b: There is no significant relationship between family-WC and self-efficacy.	Not supported
	2c: Self-efficacy mediates the relationship between family-WC and OCB.	Supported
H3	3a: There is no significant relationship between supervisory support and OCB.	Not supported
	3b: There is no significant relationship between supervisory support and Self-efficacy	Not supported
	3c: Self-efficacy mediates the relationship between supervisory support and OCB.	Supported
H4	4: There is no significant relationship between self-efficacy and OCB.	Not supported

4.7   Chapter Summary

This chapter illustrates the result of this research. It begins with the preparation of the data in terms of reverse score items, missing value, and outliers. This is followed by the normality test for the data. Then, the demographics characteristics of the respondents, descriptive analysis, and multicollinearity are also presented. The reliability and validity analyses are discussed. The measurement model and structural model are explained in

detail and the results were examined. Lastly, the hypotheses developed were tested and the results were analysed. The hypothesis testing result are also summarised at the end of this chapter.

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter discusses the results obtained from the data analysis presented in Chapter 4. This chapter states, explains, discusses, relates, and puts into perspective the findings of this study. The discussion is divided based on the hypotheses in this study. The findings of the research are also compared and contrasted with previous studies.

5.2 Discussion of Findings

This research is embedded into one underpinning theory, namely the conservation of resource (COR) theory through the resource loss and resource gain perspective. The main purpose of this research was to examine the causal relationship between work-FC, family-WC, and supervisory support with organisational citizenship behaviour and also the role of self-efficacy as a mediator on those linkages.

This study addresses three main research objectives that gave rise to subsequent research questions. Consequently, each research questions was emphasised and corresponded to a research hypothesis. Ten (10) research hypotheses were developed for this study, each encapsulating each of the relationships in the research model. In specific, four (4) hypotheses are related to the direct relationship between the predictor variable namely work-FC, family-WC, supervisory support, and self-efficacy with the dependent variable, organisational citizenship behaviour. Another three (3) hypotheses are related to the relationship of predictor variable towards self-efficacy as a mediator variable. Lastly, another three (3) hypotheses investigate the mediation effect of self-efficacy between the relationship of the predictor's variable and the criterion variable.

Overall, out of ten (10) hypotheses developed for this study, only three (3) hypotheses were supported, and seven (7) hypotheses were not supported. The findings also conclude that self-efficacy does not mediate the relationship between work-FC and OCB. In contrast, self-efficacy was found to partially mediate the relationship between family-WC and OCB and also between supervisory support and OCB. Table 5.1 summarises the findings based on each research questions and research objectives developed in this study.

Table 5.1: Summary of the study findings

Research Questions	Research Objectives	Research Hypothesis	Findings
What are the effects of work-FC, family-WC, supervisor support and self-efficacy on OCB?	To examine the relationship between work-FC, Family-WC, supervisor support, self-efficacy and OCB	**Work-FC, Family-WC, Supervisory support, Self-efficacy and OCB**	
		H1a: There is no significant relationship between work-FC and OCB	Not supported
		H2a: There is no significant relationship between family-WC and OCB	Not supported
		H3a: There is no significant relationship between supervisory support and OCB	Not supported
		4: There is no significant relationship between self-efficacy and OCB	Not supported
What are the effects of work-FC, family-WC, supervisor support on self-efficacy?	To examine the relationship between work-FC, family-WC, supervisor support and self-efficacy	**Work-FC, Family-WC, Supervisory support and Self-efficacy**	
		H1b: There is no significant relationship between work-FC and self-efficacy.	Supported
		H2b: There is no significant relationship between family-WC and self-efficacy.	Not supported
		H3b: There is no significant relationship between supervisory support and self-efficacy	Not supported

Research Questions	Research Objectives	Research Hypothesis	
Does self-efficacy mediates the relationship between work-FC, family-WC, and supervisor support in OCB?	To investigate the mediating effect of self-efficacy on the relationship between work-FC, family-WC and supervisor support on OCB	**Self-efficacy mediates Work-FC, Family-WC Supervisory support and OCB**	
		H1c: Self-efficacy mediates the relationship between work-FC and OCB.	Not supported
		H2c: Self-efficacy mediates the relationship between family-WC and OCB.	Supported
		H3c: Self-efficacy mediates the relationship between supervisory support and OCB	Supported

5.2.1 Research Question 1: What are the Effects of Work-FC, Family-WC, Supervisory Support, and Self-efficacy on Organisational Citizenship Behaviour?

5.2.1.1 The Relationship between Work-FC and Organisational Citizenship Behaviour

Hypothesis 1a explores the relationship between work-FC and OCB. In contrast to previous studies which showed a negative or lack of relationship between work-FC and OCB, this study found that work-FC has a positive significant relationship with OCB (β = 0.107*, t = 2.141, p < 0.05). It can be inferred that the pressure to engage in work responsibilities is higher than the pressure to meet family demand. Therefore, employees will increase their effort to perform work-related responsibilities while allowing themselves to engage in citizenship behaviour within an organisation.

Aligned with the COR theory, an individual would perform initiatives at home by spending available resources in fulfilling work demand, such as by rearranging a personal

plan because of work, by working from home, or by taking on special projects. An individual would invest more resources in accomplishing organisational demand when he/she is at home despite the need to fulfil family obligations. Although higher conflict may occur due to work interference in family lives, an individual may still be willing to invest available resources and increase his/her citizenship behaviour to achieve required organisation performances.

This finding above is aligned with the findings obtained by Fathuma (2013), Bolino et al. (2013), and Bolino and Turnley (2005), who found that OCB is positively influenced by work-family conflict. Findings from the current study can also be related to the "dark side" of OCB raised by Bolino, Klotz, Turnley, and Harvey (2013) in that employees' perceiving higher levels of work-family conflict is due to the pressure to perform OCB. This pressure is known as "citizenship pressure". Although organisations may benefit from the higher level of citizenship obligation from their employees, they are likely to suffer from the increased conflict whereby work responsibilities interfere with their family lives.

The result of this study contradicts the findings of Beham (2011), Bighami et al., (2014), Lambert, Kelley, and Hogan (2013), Wang, Lee, and Wu (2017) as well as Yu et al., (2018). Most of the previous studies have found that work-FC has a negative effect on employee's citizenship behaviour. The contradiction with Malaysian context could be due to the notable differences in the current implementation of a new policy in the public sector, which affects the organisational settings. The new policy, such as flexible working hours, is being implemented in all Malaysian government departments and agencies since 2007. This initiative has been applied with the objective to facilitate a balance of working hours and family time for the public sector employees (Bernama, 2019). The flexibility

of working hours have allowed public administrators to manage their time resources in managing work and family demands while engaging themselves in citizenship behaviours in the workplace.

5.2.1.2 The Relationship between Family-WC and Organisational Citizenship Behaviour

Hypothesis 2a proposes that family-WC has no significant relationship with OCB among the employees in the public sector. The result from the path analysis of the structural model reveals that family-WC has a negative effect on the employees' OCB (β = -0.202**, t = 4.324, p < 0.01). Therefore, this hypothesis is not supported. The finding indicates that increased conflict between family interference with work will lower an employee's participation in organisational citizenship behaviour.

Family-WC occurs when a family demand interferes with work responsibilities (Michel et al., 2011). An individual may need to fulfil family demand while performing work task and therefore, are unable to engage in extra-role behaviour hence contribute towards an organisation. This finding is aligned with the COR theory which denotes that when an individual perceives conflict, he/she will have a limited resource to perform work responsibilities because he/she needs to meet family obligations in the workplace.

When an individual perceives conflict due to family interference, available resources will be depleted because they are used to fulfil family responsibilities. As a result, individuals will prevent themselves from engaging in any citizenship behaviour to protect the limited resource thus hindering them to contribute to any extra-role behaviour within an organisation to preserve their available resources.

This finding confirms the results from Beham (2011), Cloninger, Selvarajan, Singh, and Huang (2015), O 'loughlin (2016), Wang et al. (2017), and Xia et al., (2018) which conclude that an increasing conflict between family and work may lower employees' initiative to be involved in citizenship behaviour due to the limited resources available to perform work responsibilities.

5.2.1.3 The Relationship between Supervisory Support and Organisational Citizenship Behaviour

Hypothesis 3a suggests that there is no significant relationship between supervisory support and OCB among employees in the public sector. The result of the analysis did not support the hypothesis since the result is positively significant with a t-value above 1.96 and a p-value of less than 0.01 ($\beta = 0.295^{**}$, $t = 6.923$, $p < 0.01$). The result indicates that supervisory support has a positive significant effect on OCB among the employees in the public sector. It can be inferred that when support from supervisory is increased, employees will actively participate in citizenship behaviour in an organisation.

Hence, employees who perceive support from their supervisor will be more confident in participating in decision making, thus leading them to be involved in citizenship behaviour. In line with the COR theory, a supportive supervisor is perceived as an access to an available resource. Support from a supervisor will give excessive resources available for employees. Individuals who possess additional resources will be in a state of resource gain spiral (Hobfoll, 2001) state. They will invest owned resources by engaging in extra-role behaviour to gain further resources, as suggested in the COR

theory corollaries. As mentioned in the corollary one, individuals who have more resources would have an opportunity to simply gain further resources.

The finding is consistent with that found by Rubin (2013), Wang et al., (2013), Wang (2014), Randhawa and Kaur (2015), Yadav and Rangnekar (2015) as well as Tremblay and Gibson (2016). For instance, a study conducted by Tang and Tsaur (2016) highlighted that support and resources provided by supervisor foster the willingness of employees to provide services. Hence, support from a supervisor will make employees feel recognised, and the instrumental and emotional support received would encourage them to give a higher level of performance and help the organisation for better productivity and effectiveness.

The finding also is concurrent with the study conducted by Priyankara et al. (2018) on the leader's support and organisational citizenship behaviour for the environment in workplace. The authors found that a leader's support has a positive influence on employees OCB for the workplace environment. Support received from superior's leads to improvement of employee's self-determination and influence the display of the environmental OCB.

Similarly, Dai et al. (2018) found that supervisory support influenced organisational citizenship behaviour by assisting employees in identifying the roles and by receiving feedback for their hard work, which in turn, increase extra-role behaviour. Hence, the study concluded that when employees perceive the resources acquired from the supervisors, they are more willing to spend additional effort in their work task.

5.2.1.4 The Relationship between Self-efficacy and Organisational Citizenship Behaviour

Hypothesis 4 proposes that self-efficacy has no significant relationship with OCB. The finding of this study shows that this hypothesis is not supported since the relationship is significant with a β value of 0.40, a t-value higher than 1.96 (t = 8.551), and a p-value of less than 0.01 ($p < 0.01$). Therefore, it can be concluded that self-efficacious employees will actively engage in citizenship behaviour in an organisation.

Following the COR theory, self-efficacy as a personal resource is useful for the acquisition of additional resources (Simbula, Guglielmi, & Schaufeli, 2011). With additional resources, an individual will likely spend current resources for resource gain through citizenship behaviour. Specifically, self-efficacy enhances employees' strong belief in their capabilities to perform work obligation while being able to engage in citizenship behaviour.

This finding confirms the results of previous studies which denote that self-efficacy has a significant impact on OCB. For instance, the finding of the present study concurs with Bogler and Somech (2004), Walumbwa et al. (2010) and Sahertian, (2010) who found that self-efficacy had a positive influence on the OCB among the employees in public services, private sector, and financial institution. Hence, this finding is also consistent with Chen and Kao (2011) who found that the self-efficacy among police officers can encourage their citizenship behaviour, particularly by creating a good working environment and expanding the knowledge, skills, and capacity required for the task to be performed.

The finding of the present study is also consistent with Beauregard (2012) who found that self-efficacious employees in a government organisation significantly affected their citizenship behaviour in the workplace. Beauregard (2012) suggested that an organisation encourage citizenship behaviour by instilling the belief that the employees are capable of successfully performing and excelling a higher level of performance. Hu and Liden (2013) also reported similar findings in the study conducted among employees in a manufacturing company.

The study finding is also consistent with the empirical study of Cohen and Mohamed (2015), who pointed out that self-efficacy influences an individual's perceived situation, which in turn affects their decision and behaviour. An individual with high self-efficacy will be encouraged to activate sufficient effort and accurate behaviour to produce successful outcomes. In a similar vein, Khodabandeh and Ardabili (2015) reported that employees with higher self-efficacy do create responsiveness in order to improve their citizenship behaviour in an organisation. Kao (2017) also found that self-efficacious individuals were able to complete the task in hand with a high degree of motivation and that they were more enthusiastic and able to demonstrate OCBs.

This study is also aligned with the latest study conducted by (1) Zubair et al. (2019) among employees in a pharmaceutical company, (2) Adewale and Ghavifekr (2019) and Ajat et al. (2019) among employees in an academic institution. On the basis of their findings, it can be concluded that OCB is directly and positively affected by self-efficacy. Specifically, increase in self-efficacy as a positive attitude will lead to increased OCB.

5.2.2 Research Question 2: What are the Effects of Work-FC, Family-WC, and Supervisory Support on Self-efficacy?

5.2.2.1 The Relationship between Work-FC and Self-efficacy

Hypothesis 1b suggests no significant relationship between work-FC and self-efficacy. Based on the finding from the path analysis, it was concluded that work-FC does not have a significant relationship with self-efficacy ($\beta = 0.068$, $t = 1.451$, $p > 0.05$). Hence, the hypothesis is supported. This finding indicates that the employees' work responsibilities that interfere with a family domain does not affect their self-belief in performing their task at workplace. They perceived stress as being caused by multiple reasons and does not influence their self-belief to exercise appropriate attitude and behaviour.

When an individual perceived conflict due to work demand interferes with family responsibilities, a high self-efficacious individual would evaluate his/her coping skills in handling his/her ability to utilise available resources in order to accomplish specific tasks. High self-efficacy protects employees and help them to avert from conflicting family and work demands (Cho & Allen, 2012). It can therefore be concluded that the conflict perceived due to incompatibility of resources available between work and family domain does not affect employees' self-confidence. Employees who believe in their ability to manage the resources in multiple roles would have the confidence to possess the necessary skills to cope with the demands from both domains while improving their ability to utilise their resources (Hobfoll, 2002).

Additionally, the study findings have also confirmed the propositions of Wiener (2005) and Byrd-Poller, (2013) study who emphasised that role conflict (work-family conflict) does not influence individual self-efficacy. It is presumed that there is no relationship between conflict in roles and self-efficacy, and therefore, this study confirms the previous findings to the point that individual role conflict self-efficacy has no significant influence on the conflict perceived by employees in the public sector. Hence, Zellars, Hochwarter, Perrewe, Miles, and Kiewitz (2001) found that conflict in role between work and family has a negative relationship with employees self-efficacy among employees in health institutions.

It can be inferred from the finding above that within the resource-based view under the COR theory, self-efficacy is not affected by the resource depletion situation caused by the conflict when work responsibilities interfere with home demands. The result could support the notion that ADO in the public sector has a positive personality trait in terms of agreeableness, conscientiousness, extraversion, openness, and emotional stability, which have a significant relationship towards basic self-value (Siti Rohana, Fatimah, Mohamad Irwan, & Zulanefa, 2014).

However, the result also contradicts with the findings by Tang and Chang, (2010), Cinamon (2010) as well as Smoktunowicz et al. (2017) study in which conflict between work and family was found to be negatively significant with self-efficacy. The finding of the present study is also contradict with Abdul Rahman, Najmi, Ariyanti, and Ratnawati, (2017), who found that role conflict has a positive relationship with employees' self-efficacy. A conflict may arise due to the mismatch of organisation goals and the professional orientation of organisation's members, leading to the emergence of role

stress. Employees therefore need to have high self-efficacy in order to be confident in providing services and be satisfied with their job.

Employees with high self-efficacy will be more adept at managing and directing their feelings, thoughts, and desire to overcome role stress. High self-efficacy will encourage them to feel confident to complete a given task (Abdul Rahman et al., 2017). In contrast, the various initiatives implemented on the structural work-life balance for employees in the public sector have managed to reduce stress and increase personal resilience, thus enabling the employees to cope with growing pressures while sustaining their well-being and enhancing performance (Noraini & Nor Diana, 2015). Such a situation indicates that the employees in the public sector have managed their work-and-family conflict without affecting their self-confidence at workplace.

5.2.2.2 The Relationship between Family-WC and Self-efficacy

Hypothesis 2b proposes no significant relationship between family-WC and self-efficacy. The path analysis result shows that family-WC has a negative significant relationship with self-efficacy (β = -0.239, t = 5.01, p < 0.01). The result in Table 4.16 supports hypothesis 2b. This finding indicates that higher conflict due to the interference of family demand towards work responsibilities could result in lower self-efficacy.

The result of the present study confirm the previous findings by Cinamon et al., (2007), Houle et al., (2012) and Smoktunowicz et al. (2017) who distinguished work-family conflict into bidirectional construct and investigate the relationship between family-WC and self-efficacy. Likewise, those studies found that family-WC is negatively influenced employee's self-efficacy. The findings concluded that higher demand from

family to be fulfilled by one's individual will results in higher work-related stress, which in turn, leads to decrease in self-belief to perform work-related tasks.

From the COR theory perspective, it can be inferred that when an individual perceives higher conflict at the workplace because of the interference of family demand, the resource available for the individual will be decreased. Employees who have to fulfil family responsibilities will result in their perceived stress due to a limited resource to perform a work task. They will feel not confident to handle stressful situations, such as managing family while at the same time being obligated to perform work responsibilities. At the same time, individuals will be likely to protect the current resource and prevent them from losses to rebuild their self-confidence and will be able to fulfil work responsibilities. Accordingly, the higher conflict perceived will lead to lower self-efficacy in managing the demands between family and work.

5.2.2.3 The Relationship between Supervisory Support and Self-efficacy

Hypothesis 3b suggests a relationship between supervisory support and self-efficacy. The finding shows that this hypothesis is not supported. It is found that there is a positive significant relationship between supervisory support and self-efficacy (β = 0.505, t = 14.823, p < 0.05). It can be concluded therefore that increased supervisory support will increase employee's self-belief.

The finding above is aligned with the earlier studies conducted on the link between supervisory support and self-efficacy. Previous studies (Gibson et al., 2009; Karatepe & Olugbade, 2009; Polizzi, 2009) found that supervisory support plays a significant role in promoting employees' self-efficacy. The studies concluded that the support received from

supervisors reinforced and motivated the employees to activate the feeling of self-belief in managing their work environment.

The finding of this study is also in agreement with the empirical studies by Chen and Scannapieco (2010) and Houle et al. (2012), which showed that support from supervisor fostered individual positive thoughts, as well as strengthened and motivated actions and capabilities, which all helped the employees to successfully perform the task in hand. The studies suggested that supervisory support is an important factor to reduce the employees' stress, particularly by providing guidance and increasing their self-efficacy.

The finding of the present study is also consistent with Nisula (2015) who studied the effect of supervisory support and self-efficacy on the outcome of individual improvisation in a municipal organisation. The study reported a positive association between supervisory support and self-efficacy. Ahmed et al. (2017) also found that supervisory support has a positive influence on Malaysian students' psychological capital (self-efficacy). The study noted that supervisory support can help the subordinates to feel positive about their abilities and competencies, which in turn, increased their mental strength to overcome challenges.

In a more recent study by Siti et al. (2019) among employees working in central business and government hub in Malaysia, they found a positive significant relationship between supervisory support and self-efficacy. The study highlighted that the employees perceived support from supervisory made them feel efficacious and increased their work engagement in the organisation. Hence, it is also suggested that supervisory support and

self-efficacy are the two important resources that can be used to manage the challenges in providing the service.

Aligned with the COR theory, individuals with a greater resource (support) become motivated to spend considerable effort to perform the task. When employees perceived supportive environment from their supervisor, they become confident in their capabilities to organise and execute their job successfully. Employees views support from their supervisor as a positive interaction which leads to the less negative effect associated with the stressor (Stetz, Stetz, & Bliese, 2006). Therefore, higher supervisor support provides additional resources that strengthening an individual's self-efficacy.

5.2.3 Research Question 3: Does Self-efficacy Mediate the Relationship between Work-FC, Family-WC, and Supervisory Support in Organisational Citizenship Behaviour?

5.2.3.1 Self-efficacy Mediates the Relationship between Work-FC and Organisational Citizenship Behaviour

Hypothesis 1c tests the mediating role of self-efficacy on the relationship between work-FC and OCB. Based on the analysis results, there is a strong direct relationship between work-FC and OCB, as shown in Table 4.16 with a path coefficient ($\beta = 0.107$**, t-value $= 2.141$, $p < 0.05$). Hence, the direct relationship between work-FC and self-efficacy ($\beta = 0.068$, $t = 1.451$, $p > 0.05$) is not significant while self-efficacy is positively significant with OCB ($\beta = 0.40$**, $t = 8.551$, $p < 0.01$).

Table 4.17 indicates that the mediation effect of self-efficacy can be seen as not significant at a p value of above 0.05 ($p = 0.150$) for path work-FC $\rightarrow$ self-efficacy $\rightarrow$ OCB. The indirect effect of self-efficacy ($0.068 \times 0.40 = 0.027$) indicates a positive but not significant contribution since the p value is larger than the threshold value of 0.05 ($p > 0.05$) and the t value is less than 1.96 ($t = 1.439$). This finding indicates that self-efficacy has no mediating effect on the relationship between work-FC and OCB. Therefore, this study concludes that hypothesis 1c is not supported.

Concerning the direction of effect, it would appear that self-efficacy does not intervene the relationship between work-FC and OCB. This can be explained from the fact that individuals feel more pressured to satisfy work responsibilities compared to family demand, and therefore, the conflict arisen will affect their behavioural outcome in an organisation. Hence, individuals with high self-efficacy do not have any influence on the perceived conflict due to the limited resources available when work demand interferes with family responsibilities.

Consistent with the COR theory, when an individual perceives a high conflict between work and family, it does not influence his or her self-belief in performing work-related tasks at workplace. Because the resources are mostly used at home to fulfil work responsibilities, individuals tend to conserve their balanced resources and avoid themselves from engaging in citizenship behaviour. A personal resource such as self-efficacy does not influence an individual's perceived stress due to the conflict between work and family and their behavioural outcome at workplace.

5.2.3.2 Self-efficacy Mediates the Relationship between Family-WC and Organisational Citizenship Behaviour

Hypothesis 2c proposes that self-efficacy mediates the relationship between family-WC and OCB. The finding shows that both the interactions between family-WC and self-efficacy and the relationship between family-WC and OCB are significant.

As indicated from Table 4.17, the mediation effect of self-efficacy is significant at a p value of less than 0.01 ($p < 0.01$) for path family-WC $\rightarrow$ self-efficacy $\rightarrow$ OCB. The indirect effect of self-efficacy (-0.239 $\times$ 0.40 = -0.095) indicates a negative significant contribution with a t value larger than 1.96 (t = 4.338). This indicates that self-efficacy has a mediating effect on the relationship between family-WC and OCB. Therefore, it can be concluded that hypothesis 2c is accepted.

It can also be inferred from the finding that individuals have a self-belief that they can manage family demands without having the matter interfering with their work in an organisation. As such, responsibilities at work and family demand can be fulfilled, and conflict can be managed effectively to allow an individual to contribute to citizenship behaviour.

The inclusion of self-efficacy is relevant and important to ensure that employees are able to manage and protect limited resources in order to actively engage in OCB. As such, protecting and conserving available resources can assist employees to balance work demand and family responsibilities while becoming more efficient and productive through citizenship behaviour.

According to the COR theory, when an individual personal resource such as self-efficacy is higher, it can assist individuals to cope with the stressful situation caused by family demand interference. The resource loss situation perceived by the employees can be intervened by self-belief in managing resources. This will result with a positive attitudinal and behavioural outcome. Specifically, the coping effort from self-efficacious feeling allows individual to protect and conserving limited resources and allow them to invest available resource in extra-role behaviour such as OCB.

5.2.3.3 Self-efficacy Mediates the Relationship between Supervisory Support and Organisational Citizenship Behaviour

Hypothesis 3c proposes that self-efficacy mediates the relationship between supervisory support and OCB. The analysis showed that the relationship of supervisory support with self-efficacy and self-efficacy with OCB are both significant.

As indicated from Table 4.17, the mediation effect of self-efficacy is significant at a p-value of less than 0.01 ($p < 0.01$) with a t-value above 1.96 ($t = 6.868$) for path supervisory support $\rightarrow$ self-efficacy $\rightarrow$ OCB. The indirect effect of self-efficacy from $0.505 \times 0.40 = -0.202$ indicates that self-efficacy has a positive contribution towards OCB. The result indicates that self-efficacy has a mediating effect on the relationship between supervisory support and OCB. Therefore, hypothesis 3c is accepted.

The result of this study confirms the findings of previous studies on the mediating role of self-efficacy on the relationship between supervisory support and behavioural outcomes. For instance, a study conducted by Yang, Ding, and Lo (2016) found that self-efficacy partially mediates the relationship between ethical leadership such as supports

and OCB. Likewise, employees who perceive supports from their supervisor may develop positive judgement and tend to engage in greater behavioural effort towards the organisation.

It can be concluded that when employees perceive support from supervisor, they will become more confident to manage their work and develop self-belief to perform their task successfully. Thus, a self-efficacious individual would perform their task in hand well and at the same time are willing to participate and contribute to an organisation with an additional responsibility, such as demonstrating citizenship behaviour.

An adequate job resources such as supervisory support and personal resources, including self-efficacy, are useful for resources gain to be invested in OCB activity (Simbula et al., 2011). Aligned with the COR theory, employees with additional resources tend to invest resources in order to gain more resources in the future (Hobfoll, 2001). Therefore, individuals with excessive resources will invest additional resources by perform in citizenship behaviours in an organisation.

5.3   Chapter Summary

This chapter provides the discussion of the findings for this research. The objective of the Chapter 5 is to explain and elaborate the findings based on the result of the analyses presented in the previous chapter. Hence, the findings of this study will be put into a proper perspective and also relate to the findings of previous empirical studies. The first section of the chapter provides a summary of the result of hypotheses testing. Then, the section discussed the findings related to the direct relationships between work-FC, family-WC, supervisory support, and self-efficacy with organisational citizenship

behaviour as well as work-FC, family-WC and supervisory support with self-efficacy. Next, the chapter discussed the indirect relationship of self-efficacy as a mediator between those relationships. The next chapter, Chapter 6, provides a summary of the findings, the theoretical and managerial implications of the study, and the research limitations. Hence, few suggestions of future research and conclusions are provided.

CHAPTER 6: CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

6.1 Introduction

This chapter provides the conclusion of the major findings of the thesis. The chapter is divided into four (4) main sections. The first section begins with a summary of the findings based on the analysis conducted in the previous chapter. Then, the chapter concludes the theoretical and managerial implications of the study. The third section highlights the limitations of present study followed by suggestions for future research.

6.2 Summary of the Study

The main objective of this study is to examine the effects of work-FC, family-WC, and supervisory support towards employee's organisational citizenship behaviour and to study the mediating role of self-efficacy on these relationships. In specific, the theoretical model was hypothesised based on the following three (3) research questions:

1. What are the effects of work-FC, family-WC, supervisor support, and self-efficacy on organisational citizenship behaviour?

2. What are the effects of work-FC, family-WC, supervisor support on self-efficacy?

3. Does self-efficacy mediates the relationship between work-FC, family-WC, and supervisor support in organisational citizenship behaviour?

Consequently, this study attempts to answer the research questions above by pursuing the following three research objectives:

1. To examine the relationship between work-FC, family-WC, supervisor support, self-efficacy and organisational citizenship behaviour.
2. To examine the relationship between work-FC, family-WC, supervisor support and self-efficacy.
3. To investigate the mediating effect of self-efficacy on the relationship between work-FC, family-WC and supervisor support on organisational citizenship behaviour.

The research questions above were answered in the previous chapter and therefore, the research objectives are considered to have been successfully achieved.

Direct effect, work-FC, and family-WC were found to have a positive and negative influence on OCB respectively. Supervisory support was found to have positive effect on organisational citizenship behaviour. Self-efficacy positively affects as found to a few on individual's OCB. On the other hand, only work-FC did not show any significant effect on self-efficacy. Family-WC and supervisory support were found to have negative and positive direct effect on self-efficacy respectively.

The mediating analysis for indirect effect found that self-efficacy does not mediate the relationship between work-FC and OCB. This discovery is in contrast with family-WC. Self-efficacy was also found to partially mediates the relationship between family-WC and OCB. Also, self-efficacy was found to have a significant mediating effect between the relationship of supervisory support and OCB.

The finding of this study suggests that employee's characteristics such as self-efficacy are crucial in ensuring their ability to intervene a conflict and mediate the support

towards improving behavioural outcomes, particularly a citizenship behaviour within an organisation. Previous literature and empirical examinations on self-efficacy also suggest a predisposition on the effect of self-efficacy towards the change of individual behaviour (Bandura, 1982; Correa, 2014).

The findings also provide a final research model based on the empirical results of the SEM-PLS statistical analysis of the research model developed in this research. The model can serve as an important contribution for it emphasises several implications of the subject matter the theoretical and managerial aspects (described further in the following subsections).

The main conclusions for this study are summarised as follows:

- As the descriptive statistical analysis indicated, the most important factor for OCB belongs to self-efficacy and the less important one is family-WC. This conclusion is based on the mean values obtained for the variables (Table 4.6).

- In a direct effect analysis without a mediator (Table 4.15), work-FC, family-WC and supervisory support were found to influence OCB. Only family-WC noted a negative significant effect on OCB. Supervisory support was found to have the highest direct effect on OCB.

- From the indirect effect analysis with a mediator (Table 4.18), it was found that self-efficacy plays an important role as a mediator between work-FC, family-WC, and supervisory support with OCB. Self-efficacy partially mediates the

relationship between family-WC and supervisory support with OCB. However, self-efficacy does not mediate the relationship between work-FC and OCB.
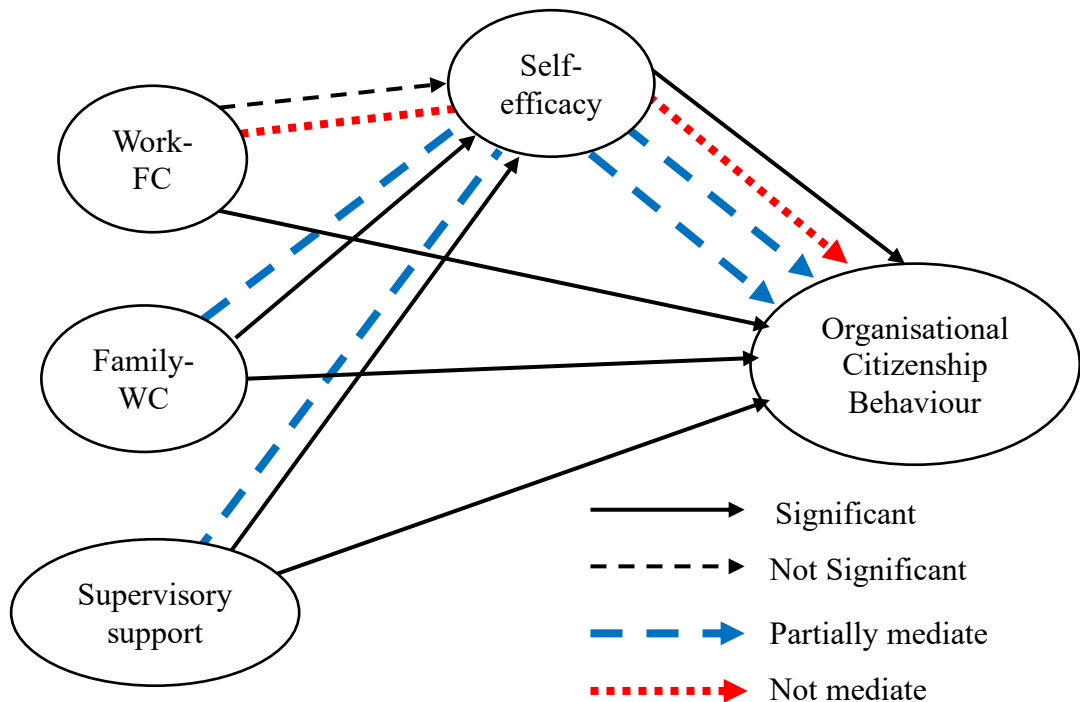
Figure 6.1: Final model

Figure 6.1 showed the final research model illustrated and further explains the conclusion of this study that is based on the empirical result that was obtained from path analysis in the previous chapter.

6.3   Theoretical Implications

This study contributes to the existing literature by providing empirical evidence regarding organisational citizenship behaviour and the potential factors affecting behavioural outcome among public administrators in Malaysia. This study has pioneered the research in the citizenship behaviour paradigm by highlighting several individuals and organisational variables from the view of the conservation of resource theory. Hence,

this study is among the first empirical studies that attempt to investigate the role of self-efficacy as a mediator for the link between work-FC, family-WC, and supervisory support with organisational citizenship behaviour. Therefore, this study also contributes to filling the important research gaps identified from the organisational citizenship behaviour literature.

Second, this study includes the mediating factor of self-efficacy, a variable that has not been distinctively studied in the literature. Past studies have examined only the direct relationship between work-FC and family-WC towards OCB (Beham, 2011; Lambert et al., 2013; Wang et al., 2017) and supervisory support towards OCB (Chen & Chiu, 2008; Ladebo, 2008; Wang et al., 2013; Wang, 2014). The present study had proved that self-efficacy plays a crucial role in mediating the relationships; self-efficacy promotes self-belief in managing limited and boundless resources for encouraging citizenship behavioural outcome. Therefore, this study presents additional insights that can facilitate the understanding of OCB, particularly in Malaysian perspective.

Thirdly, the result of this study brings key insights for the scholars in the area of OCB. The result can also contribute to the conservation of resource theory by highlighting the resource loss and resource gain principle as mentioned by Hobfoll (2001). Hence, the findings in this study play an important role in the emergence of a new perspective of other potential personal resources that might influence behavioural outcome such as organisational citizenship behaviour. With the inclusion of self-efficacy as a personal resource that might play a significant role as an intervening factor, the findings can provide fundamental understanding of a mechanism to be explored further in a different context.

In addition, the majority of the previous studies on OCB have focused on the other types of organisation such as the private sector, academic institution and public services organisations. There is a lack of research focusing on federal government organisation especially in Malaysia. Hence, there is only one study focuses on OCB in local government organisation which suggested to examines citizenship behaviour of employees in a larger setting such as federal government organisation to identify potential criteria that might affect and limit citizenship behaviour within the organisation.

The present study is the first to combine individual and organisational variables that have an effect towards citizenship behaviour into one model. The combination of both types of variables was based on the critical review of past literature on OCB and identification of the emerging factors that might have a potential effect on OCB. Hence, the study contributes to the existing literature by highlighting the types of work-FC, family-FC and supervisory support which affect OCB.

Last but not least, this research also contributes by providing a more in-depth understanding of the factors that influence OCB in the public sector context particularly in a government organisation in Malaysia. Hence, Malaysia is also known as a collectivism and culturally oriented country which has a significant influence on organisational citizenship behaviour (Lai, 2015; Rose, Herd, & Palacio, 2017). While findings from the previous studies emerge from the western settings, this study contributes to the body of knowledge by providing new evidence in the Asian context as well by widening the scope of the OCB perspective with new evidence from Asia. Hence, this study also brings significant value to the OCB studies from a distinct cultural context of Malaysia.

6.4   Managerial Implications

This study also provides several managerial implications. First, the OCB activities are largely related to voluntary and spontaneous behaviours, which have much in common with the bureaucratic values, public service ethos, and motivation in public service (Shim & Faerman, 2015; Taylor, 2013). The major role of public servants is to translate government policies into practical actions and services to citizens so the *social contract* between the rulers and the people could be reinforced (Vigoda-Gadot & Beeri, 2011). However, OCB is rarely mentioned in public administration research and theory. Very few attempts have been made to develop a comprehensive analysis of citizenship behaviour that could be related to general management science, particularly towards the images of public administration theory and action (Vigoda & Golembiewski, 2001). In addition, only a few literatures were published on the phenomenon, which is lacking in the discipline (Koberg et al., 2005).

As public organisations are under pressure to continually improve the efficiency and effectiveness of services, understanding the factors associated with OCBs is essential as these behaviours have been linked to the improvement of public service delivery (Taylor, 2013). The inclusion of OCBs can supply timely insights on the relationships inherent in the domain (Gould-Williams, Mostafa, & Bottomley, 2015).

The past decade has witnessed OCB becoming one of the most studied topics in management literature, among which, are the entire sets of spontaneous activities which are beyond the role requirements prescribed (Katz, 1964). OCB is useful in the public sector because it contributes to improving public service, overcoming bureaucracy's ills, and encouraging the performance of work units and agencies. The concept is interesting

as the term *citizenship* is a core terminology in political science; it can be seen as an original contribution to the New Public Management jargon by emphasising the role of the people in building an effective governance. Therefore, citizenship is a fundamental concept which is strongly related to modern a public administration's goals and vision (Vigoda-Gadot & Beeri, 2011).

Second, the fact that supervisory support significantly influences organisational citizenship behaviour can implicate that managers can proactively design and develop a supportive working environment within an organisation. Managers and practitioners from human resource management, particularly, can provide supervisory support by encouraging employee's citizenship behaviour. One such measure is to establish and promote a supportive working environment where supervisors acknowledge employees' positive values and work that can bring about the success of the organisation. Supervisors should always share positive feedback and such motivational inputs perceived by the employees would make them feel that their work is recognize and meaningful.

Thirdly, this study found that family-WC is negatively related to organisational citizenship behaviour. Managers should attempt to avoid family-WC from occurring among the employees because such factor might which jeopardise employee citizenship behaviour. Family-WC is identified as a barrier to active employee's participation due to the interference of family demand in work responsibilities. This finding can be used to assist managers to focus on establishing family-friendly policies and a working environment that promotes work and family balances in an organisation.

Additionally, it is found that family-friendly policies can reduce employees work-FC and family-WC resulting in reduced stress and increase in the positive behavioural

outcome (Fiksenbaum, 2014). According to Sabitha and Surena (2017), the implementation of flexible working hours and childcare centres are few of the strategies that can help working employees to balance their work and family commitments. The recommendations are currently being implemented by the Malaysian public service department as an initiative to create a more environmentally friendly workplace.

Finally, this study is backed with theoretical support that includes self-efficacy as a vital mediator for the relationship between predictor variables and organisational citizenship behaviour. Therefore, managers in the public sector should focus on developing employee's self-efficacy to foster their belief and confidence in managing conflict and utilise the additional resource to engage in extra-role behaviour. For OCB to happen, managers can design and organise training and development programmes that focus on characteristics building. Since the main objective of promoting citizenship behaviour is to improve individual performance (Ocampo et al., 2018), managers can attentively foster employees' self-efficacy which in turn, can help the organisation to improve their productivity and efficiency.

6.5   Limitations of the Study

Firstly, this study is limited to one sector which is the public sector and focuses only on the four ministries from the federal government located in Putrajaya. Therefore, the findings of this study may not be generalised to other sectors such as the private sector, academic institutions and public services. Hence, this study also may be restricted to social aspects. For instance, the results of this study may not be generalisable to some other countries due to the sample's background characteristics. The respondents of this study are from Malaysia which is considered as having culturally collectivist values such

as teamwork, cooperation, sense of belonging and priority over group interest over self-interest compared to a western context which is more individualistic oriented (Mohammad, Quoquab, Makhbul, & Ramayah, 2016)

The second limitation is related to the data collection approach whereas a normal random sampling cannot be used in this research since the study was designed to get the data is only from "qualified" volunteer respondents. Hence, the term *qualified* indicates that the respondents must be those who are of an ADO position from a professional and managerial level. Normal random sampling cannot be conducted because the researchers cannot get the exact list of the employees' names list name from each of the ministries; the organisation's regulation restricts sharing of confidential information to an external party. Therefore, the population sampling was being used by distributing the questionnaire to all qualified respondents and the data obtained depended on the respondent's willingness to participate and give accurate information.

Thirdly, the use of cross-sectional study to collect the data may be problematic as such the scope of causal inferences between the relationships that might have been constrained (Tang & Tsaur, 2016). However, various previous studies on organisational citizenship behaviour have used cross-sectional data and therefore the data used in this study can be considered appropriate.

Lastly, this study has reported relatively low AVE value for OCB construct as shown in the previous chapter. One of the reasons for the low AVE value is the composition of the five dimensions of OCB into one single construct. This is an evidence to conceptualise OCB as a different dimension. According to Almutawa, Muenjohn, and Zhang (2018), it is recommended that OCB be studied as a second-order factor in

reflecting the Organ's five dimensions of OCB. As a conclusion, although few limitations have been identified, this study are believed to be accurately justified and the methods are appropriate according to the suitable research design and available data collection approach.

6.6   Recommendations for Future Research

Several recommendations are made to address the limitations mentioned in this study. First, it is suggested that future study replicate and empirically test the current model developed in this study in other contexts. For instance, academic institution, public service sector, and the private sector could render different results because of the differences in terms of job design, the environment, and demographic background. Hence, future research may examine the effect of predictor variables and the role of mediating variable across different settings to come out with a distinctive perspective. The findings can provide interesting insights and contribute to better understanding of OCB.

Secondly, future research can be carried out by including respondents from non-executive level and support staff in government organisation. By using a different type of respondents, the findings could provide diverse conclusions since the respondents have a different background and work responsibilities. Understanding the role of these distinct types of employees will provide a holistic perspective in the OCB domain in more detail.

Thirdly, as mentioned above, this study used a cross-sectional approach to collect the data. Since the data were collected at one specific point in time (Sekaran, 2003), it is difficult to conclude the causal relationship between the study variables. Future study

may consider utilising a longitudinal research approach for the data collection to draw a more definitive conclusion on the causal direction between the relationships. For instance, the data can be collected at two phases to observe the changes behaviour based on a certain situation or environment.

Last but not least, it is recommended that future researchers examine other potential individual-level factors that can influence employee's citizenship behaviour. The present findings have demonstrated that self-efficacy plays a significant role in managing conflict and perceived support for employee's citizenship behaviour. Future researchers may examine a moderating variable that could strengthen or weaken the relationships. The discovery can provide a further understanding of the role of mediator as well as a moderator variable, thus in-depth insights on how they influence the employee's citizenship behaviour in more detail.

In conclusion, this study strongly recommends that government organisation adopt family-friendly work policies to manage their employees' conflict between work and family, as well as implement a supportive work environment for better recognition thus enhancing a sense of belonging among employees. These measures can ensure that the employees will be equipped with the necessary soft skills needed to improve work efficiency and organisation productivity, thus creating better work performance that can contribute to the organisation's success.

REFERENCES

Abdelmotaleb, M., & Saha, S. K. (2019). Corporate Social Responsibility, Public Service Motivation and Organizational Citizenship Behavior in the Public Sector. *International Journal of Public Administration*, *42*(11), 929–939.

Abdul Karim S. Al-Eisa, Musaed A. Furayyan, & Abdullah M. Alhemoud. (2009). An empirical examination of the effects of self-efficacy, supervisor support and motivation to learn on transfer intention. *Management Decision*, *47*(8), 1221–1244.

Abdul Rahman Kadir, Najmi Kamariah, Ariyanti Saleh, & Ratnawati. (2017). The effect of role stress, job satisfaction, self-efficacy and nurses' adaptability on service quality in public hospitals of Wajo. *International Journal of Quality and Service Sciences*, *9*(2), 184–202.

Abdullah Osman, Yusuf Othman, S. M. Sohel Rana, Solaiman, M., & Bharat Lal. (2015). The influence of job satisfaction, job motivation & perceived organizational support towards organizational citizenship behavior (OCB): A perspective of American-Based Organization in Kulim, Malaysia. *Asian Social Science*, *11*(21), 174–182.

Aderibigbe, J. K., Nwokolo, E. E., & Oluwole, O. J. (2019). Effect of psychosocial factors on organisational citizenship behaviour among graduate employees in Nigeria. *Economics and Sociology*, *12*(1), 155–176.

Adewale, A. S., & Ghavifekr, S. (2019). Leadership self-efficacy and staff organizational citizenship behavior in higher education institutions: experience from Nigeria. *International Journal of Leadership in Education*, *00*(00), 1–18.

Agarwal, P. (2016). Redefining the organizational citizenship behaviour. *International Journal of Organizational Analysis*, *24*(5), 956–984.

Agarwal, S. (2016). Organizational Citizenship behavior: A Comparative Study Between Public and Private Sector Bank. *International Journal of Engineering Technology, Management and Applied Sciences*, *4*(5), 161–167.

Ahmad Zainal Abidin Abd Razak, Che Mohd Zulkifli Che Omar, & Jamal Nordin Yunus. (2010). Family issues and work-family conflict among medical officers in Malaysian public hospitals. *International Journal of Business and Social Science*, *1*(1), 26–36.

Ahmad Zainal Abidin Abdul Razak, Nek Kamal Yeop Yunus, & Aizzat Mohd Nasurdin. (2011). The impact of work overload and job involvement on work-family conflict among Malaysian doctors. *Labuan E-Journal of Muamalat and Society*, *5*, 1–10.

Aizzat Mohd. Nasurdin, Noor Hazlina Ahmad, & Cheng, L. T. (2015). Cultivating service-oriented citizenship behavior among hotel employees: the instrumental roles of training and compensation. *Service Business*, *9*(2), 343–360.

Aizzat Mohd Nasurdin, & Hsia, K. L. (2008). The Influence of Support at Work and Home on Work-Family Conflict: Does Gender Make a Difference? *Research and Practice in Human Resource Management*, *16*(1), 18–38.

Aizzat Mohd Nasurdin, Noor Hazlina Ahmad, & Cheng Ling Tan. (2016). The Role of Staffing and Orientation Practices in Predicting Service-Oriented Organisational Citizenship Behaviour. *Asian Academy of Management Journal*, *21*(2), 27–51.

Aizzat Mohd Nasurdin, & O'Driscoll, M. P. (2012). Work overload, parental demand, perceived organizational support, family support, and work-family conflict among New Zealand and Malaysian academics. *New Zealand Journal of Psychology*, *41*(1), 38–48.

Ajat, Mukhneri Mukhtar, & Mochamad Wahyudi. (2019). The Effect of Personality, Self Efficacy and Job Satisfaction on Organizational Citizenship Behavior of Vocational High Schools Teachers. *Advances in Social Science, Education and Humanities Research*, *178*(ICoIE 2018), 547–551.

Ajzen, I. (2002). Perceived Behavioral Control , Self - Efficacy , Locus of Control , and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, *32*(4), 665–683.

Akram, A., Kamran, M., Iqbal, M. S., Habibah, U., & Atif Ishaq, M. (2018). The impact of supervisory justice and perceived Supervisor support on organizational citizenship behavior and commitment to supervisor: the mediating role of trust. *Cogent Business and Management*, *5*(1), 1–17.

Alhyasat, K. M. K. (2012). The role of Islamic work ethics in developing organizational citizenship behavior at the Jordanian Press Foundations. *Journal of Islamic Marketing*, *3*(2), 139–154.

Ali Asgari, Abu Daud Silong, Aminah Ahmad, & Bahaman Abu Samah. (2008a). The Relationship between Organizational Characteristics, Task Characteristics, Cultural Context and Organizational Citizenship Behaviors. *European Journal of Economics, Finance and Administrative Sciences*, (13), 95–107.

Ali Asgari, Abu Daud Silong, Aminah Ahmad, & Bahaman Abu Samah. (2008b). The Relationship between Transformational Leadership Behaviors, Organizational Justice, Leader-Member Exchange, Perceived Organizational Support, Trust in Management and Organizational Citizenship Behaviors. *European Journal of Scientific Research*, *23*(2), 227–242.

Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2015). Meta-analysis of work-family conflict mean differences: Does national context matter? *Journal of Vocational Behavior*, *90*, 90–100.

Almutawa, Z. H., Muenjohn, N., & Zhang, J. (2018). Attitudes and behaviors as predictors of service quality in the telecommunications sector context. *International Journal of Quality and Reliability Management*, *35*(3), 656–677.

Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A Meta-Analysis of Work-Family Conflict and Various Outcomes With a Special Emphasis on Cross-Domain Versus Matching-Domain Relations. *Journal of Occupational Health Psychology*, *16*(2), 151–169.

Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice : A Review and Recommended Two-Step Approach. *Psychological Bulletin*, *103*(3), 411–423.

Annor, F., & Burchell, B. (2018). A cross-national comparative study of work demands/support, work-to-family conflict and job outcomes: Ghana versus the United Kingdom. *International Journal of Cross Cultural Management*, *18*(1), 53–72.

Anwar, M. A., Osman-Gani, A. M., Fontaine, R., & Rahman, M. S. (2017). Assessing organizational citizenship behaviour through constructing emotional intelligence. *Asia-Pacific Journal of Business Administration*, *9*(2), 105–117.

Arda, O. A., Delen, D., Tatoglu, E., & Zaim, S. (2017). An analytic approach to assessing organizational citizenship behavior. *Decision Support Systems*, *103*, 9–23.

Argyle, M. (1999). Causes and correlates of happiness. In *Wellbeing The foundations of hedonic psychology* (pp. 353–373).

Armstrong, G. S., Atkin-Plunk, C. A., & Wells, J. (2015). The Relationship Between Work–Family Conflict, Correctional Officer Job Stress, and Job Satisfaction. *Criminal Justice and Behavior*, *42*(10), 1066–1082.

Aurangzeb, Asrar, Z., Ilyas, T., & Bhutto, S. A. (2017). Work family conflict and organizational citizenship behavior in bank employees. *Industrial Engineering Letters*, *7*(2), 54–58.

Awanis, K. I. (2006). *The relationship between deviance behaviour among Mara employees in northern Malaysia and its predictors*. Universiti Sains Malaysia.

Ayinde, A. T., & Oladele, O. P. (2016). Perceived Organisational Justice and Work Locus of Control as Determinants of Organisational Citizenship Behaviour among Civil Servants in Ekiti State, Nigeria. *Revista de Asistenţǎ Socialǎ*, *1*(1), 111–122.

Bagger, J., & Li, A. (2014). How Does Supervisory Family Support Influence Employees' Attitudes and Behaviors? A Social Exchange Perspective. *Journal of Management*, *40*(4), 1123–1150.

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309–328.

Ballout, H. I. (2009). Career commitment and career success: Moderating role of self-efficacy. *Career Development International*, *14*(7), 655–670.

Baltes, B. B., & Heydens-Gahir, H. A. (2003). Reduction of Work-Family Conflict Through the Use of Selection, Optimization, and Compensation Behaviors. *Journal of Applied Psychology*, *88*(6), 1005–1018.

Bandura, A. (1977). Self-efficacy : Toward a Unifying Theory of Behavioral Change. *Psychological Review*, *84*(2), 191–215.

Bandura, A. (1982). Seld-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122–147.

Bandura, A. (1986). *Social foundation of thought and action: A social-cognitive view*. Englewood Cliffs.

Bandura, A. (1989). Human Agency in Social Cognitive Theory Albert Bandura Stanford University. *American Psychologist*, *44*(9), 1175–1184.

Bandura, A. (1997). *Self-Efficacy - The Exercise of Control*. New York: W. H. Freeman and Company.

Bandura, A. (2006). Guide for Constructing Self-efficacy Scales. In F. Pajares & T. Urdan (Eds.), *Self-Efficacy Beliefs of Adolescents* (pp. 307–337). Greenwich, Connecticut: Information Age Publishing.

Barbaranelli, C., Paciello, M., Biagioli, V., Fida, R., & Tramontano, C. (2018). Positivity and Behaviour: The Mediating Role of Self-Efficacy in Organisational and Educational Settings. *Journal of Happiness Studies*, *20*(3), 707–727.

Barnette, J. J. (2000). Effects of stem and Likert response option reversals on survey internal consistency: If you feel the need, there is a better alternative to using those negatively worded stems. *Educational and Psychological Measurement*, *60*(3), 361–370.

Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research : Conceptual , Strategic , and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.

Bateman, T. S., & Organ, D. W. (1983). Job Satisfaction and the Good Soldier: The Relationship Between Affect and Employee 'Citizenship'. *Academy of Management Journal*, *26*(4), 587–595.

Beauregard, T. A. (2012). Perfectionism, self-efficacy and OCB: the moderating role of gender. *Personnel Review*, *41*(5), 590–608.

Beham, B. (2011). Work-family conflict and organisational citizenship behaviour: Empirical evidence from Spanish employees. *Community, Work and Family*, *14*(1), 63–80.

Belwalkar, S., Vohra, V., & Pandey, A. (2018). The relationship between workplace spirituality, job satisfaction and organizational citizenship behaviors – an empirical study. *Social Responsibility Journal*, *14*(2), 410–430.

Berman, E. M. (2011). *Public Administration and Public Policy: A Comprehensive Publication Program*. (J. RABIN, Ed.). Boca Raton: Taylor & Francis Group.

Bernama. (2017, September 28). 66 kes tatatertib penjawat awam 2016. *Sinar Harian*.

Bernama. (2019). New flexible working hours for federal government agencies from Aug 1.

Beutell, N. J., & Schneer, J. A. (2014). Work-family conflict and synergy among Hispanics. *Journal of Managerial Psychology*, *29*(6), 705–735.

Bhanthumnavin, D. (2003). Perceived social support from supervisor and group members' psychological and situational characteristics as predictors of subordinate performance in Thai work units. *Human Resource Development Quarterly*, *14*(1), 79–97.

Bhattacherjee, A. (2012). *Social Science Research: Principles, Methods, and Practices* (3rd Editio).

Bies, R. J. (1989). *Organizational Citizenship Behavior: The Good Soldier Syndrome. Academy of Management Review* (Vol. 14).

Billing, T. K., Bhagat, R. S., Babakus, E., Krishnan, B., Jr., D. L. F., Srivastava, B. N., … Aizzat Mohd. Nasurdin. (2014). Work-Family conflict and organisationally valued outcomes: The moderating role of decision latitude in five national contexts. *Applied Psychology*, *63*(1), 62–95.

Bishwajit Mazumder, Khumyu, A., & Boonyanurak, P. (2016). Relationships between organizational commitments, supervisory support and job satisfaction of nurses in a public specialized hospital, Bangladesh. *Bangladesh Journal of Medical Science*, *15*(01), 39–43.

Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and Teacher Education*, *20*(3), 277–289.

Bohle, S. A. L., & Alonso, A. R. M. (2016). The effect of procedural fairness and supervisor support in the relationship between job insecurity and organizational citizenship behavior. *Review of Business Management*, *19*(65), 337–357.

Bolino, M. C., Hsiung, H.-H. H., Harvey, J., & LePine, J. A. (2015). 'Well, i'm tired of tryin'!' organizational citizenship behavior and citizenship fatigue. *Journal of Applied Psychology*, *100*(1), 56–74.

Bolino, M. C., Klotz, A. C., Turnley, W. H., & Harvey, J. (2013). Exploring the dark side of organizational citizenship behavior. *Journal of Organizational Behavior*, *34*(4), 542–559.

Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology*, *90*(4), 740–748.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, *10*(2), 99–109.

Botha, H. (2007). *Relationships between Job Variables: The Moderating Effects of Support and the Mediating Effects of Job Satisfaction, Affective Commitment and Continuance Commitment in the Support Worker Industry*. University of Waikato.

Bradshaw, C. C. (2014). *Coping With Work-family Conflict: An Examination of Work-family Conflict Help-seeking Behavior in Both Organizational and Relational Contexts*. University of Missouri. https://doi.org/10.1007/s13398-014-0173-7.2

Bragger, J. D., Rodriguez-Srednicki, O., Kutcher, E. J., Indovino, L., & Rosner, E. (2005). Work-family conflict, work-family culture, and organizational citizenship behavior among teachers. *Journal of Business and Psychology*, *20*(2), 303–324.

Brief, A. P., & Motowidlo, S. (1986). Prosocial Organisation Behaviours. *Academy of Management Review*, *11*(4), 710–725.

Brummelhuis, L. L. ten, & Bakker, A. B. (2012). A Resource Perspective on the Work-Home Interface: The Work-Home Resources Model. *American Psychologist*, *67*(7), 545–556.

Byrd-Poller, L. D. (2013). *Exploring the Relationship between Role Conflict, Role Ambiguity and General Perceived Self-Efficacy: A Quantitative Study of Secondary Assistant Principals*. The George Washington University.

Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*(2), 169–198.

Caillier, J. G. (2016). Linking Transformational Leadership to Self-Efficacy, Extra-Role Behaviors, and Turnover Intentions in Public Agencies: The Mediating Role of Goal Clarity. *Administration and Society*, *48*(7), 883–906.

Campbell, J. W., & Im, T. (2016). PSM and Turnover Intention in Public Organizations: Does Change-Oriented Organizational Citizenship Behavior Play a Role? *Review of Public Personnel Administration*, *36*(4), 323–346.

Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior*, *56*(2), 249–276.

Carlson, D. S., & Perrewe, P. L. (1999). The role of social support in the stressor-strain relationship: an examination of work-family conflict. *Journal of Management*, *25*(4), 513–540.

Carter, M. Z., Mossholder, K. W., Feild, H. S., & Armenakis, A. A. (2014). Transformational Leadership, Interactional Justice, and Organizational Citizenship Behavior. *Group & Organization Management*, *39*(6), 691–719.

Casper, W. J., Harris, C., Taylor-Bianco, A., & Wayne, J. H. (2011). Work-family conflict, perceived supervisor support and organizational commitment among Brazilian professionals. *Journal of Vocational Behavior*, *79*(3), 640–652.

Çavuş, M. F., & Develi, A. (2017). Ethical Climate and Organizational Citizenship Behaviour. *International Journal of Human Resource Studies*, *7*(1), 38–51.

Cetin, S., Gürbüz, S., & Sert, M. (2015). A Meta-analysis of the Relationship Between Organizational Commitment and Organizational Citizenship Behavior: Test of Potential Moderator Variables. *Employee Responsibilities and Rights Journal*, *27*(4), 281–303.

Chan, X. W., Kalliath, T., Brough, P., O'Driscoll, M., Siu, O.-L., & Timms, C. (2015). Self-efficacy and work engagement: test of a chain model. *International Journal of Manpower*.

Chelariu, C., & Stump, R. (2011). A study of work-family conflict, family-work conflict and the contingent effect of self-efficacy of retail salespeople in a transitional economy. *European Journal of Marketing*, *45*(11), 1660–1679.

Chen, C.-C., & Chiu, S.-F. (2008). An Integrative Model Linking Supervisor Support and Organizational Citizenship Behavior. *Journal of Business and Psychology*, *23*(1/2), 1–10.

Chen, C.-C., & Chiu, S.-F. (2009). The Mediating Role of Job Involvement in the Relationship Between Job Characteristics and Organizational Citizenship Behavior. *The Journal of Social Psychology*, *149*(4), 474–494.

Chen, C.-H. V., & Kao, R.-H. (2011). A multilevel study on the relationships between work characteristics, self-efficacy, collective efficacy, and organizational citizenship behavior: The case of Taiwanese police duty-executing organizations. *Journal of Psychology: Interdisciplinary and Applied*, *145*(4), 361–390.

Chen, C. H., Wang, S. J., Chang, W. C., & Hu, C. S. (2008). The effect of leader-member exchange, trust, supervisor support on organizational citizenship behavior in nurses. *The Journal of Nursing Research*, *16*(4), 321–328.

Chen, S. H., Yu, H. Y., Hsu, H. Y., Lin, F. C., & Lou, J. H. (2013). Organisational support, organisational identification and organisational citizenship behaviour among male nurses. *Journal of Nursing Management*, *21*(8), 1072–1082.

Chen, S. Y., & Scannapieco, M. (2010). The influence of job satisfaction on child welfare worker's desire to stay: An examination of the interaction effect of self-efficacy and supportive supervision. *Children and Youth Services Review*, *32*(4), 482–486.

Chen, T., Li, F., & Leung, K. (2016). When does supervisor support encourage innovative behavior? Opposite moderating effects of general self-efficacy and internal locus of control. *Personnel Psychology*, *69*(1), 123–158.

Cherian, J., & Jacob, J. (2013). Impact of Self Efficacy on Motivation and Performance of Employees. *International Journal of Business and Management*, *8*(14), 80–88.

Cho, E., & Allen, T. D. (2012). Relationship between work interference with family and parent-child interactive behavior: Can guilt help? *Journal of Vocational Behavior*, *80*(2), 276–287.

Chomeya, R. (2010). Quality of Psychology Test Between Likert Scale 5 and 6 Points. *Journal of Social Sciences*, *6*(3), 399–403.

Choon Jin Teh, Ali Boerhannoeddin, & Azman Ismail. (2012). Organizational culture and performance appraisal process: Effect on organizational citizenship behavior. *Asian Business & Management*, *11*(4), 471–484.

Chun-hsien, L., Fang-pei, N., Chin-yung, P., & Tao-sheng, C. (2014). A Study on the Correlations between Knowledge Sharing Behavior and Organizational Citizenship Behavior in Catering Industry: The Viewpoint of Theory of Planned Behavior. *Anthropologist*, *17*(3), 873–881.

Cinamon, R. G. (2006). Anticipated Work – Family Conflict : Effects of Gender , Self-Efficacy , and Family Background. *The Career Development Quarterly*, *54*(March 2006), 202–215.

Cinamon, R. G. (2010). Anticipated work-family conflict: Effects of role salience and self-efficacy. *British Journal of Guidance and Counselling*, *38*(1), 83–99.

Cinamon, R. G., Weisel, A., & Tzuk, K. (2007). Work–Family Conflict Within the Family Crossover Effects, Perceived Parent– Child Interaction Quality, Parental Self-Efficacy, and Life Role Attributions. *Journal of Career Developmen*, *34*(1), 79–100.

Cloninger, P. A., Selvarajan, T. T. (Rajan), Barjinder Singh, & Huang, S. (Charlie). (2015). The mediating influence of work–family conflict and the moderating influence of gender on employee outcomes. *International Journal of Human Resource Management*, *26*(18), 2269–2287.

Cohen, A., & Mohamed Abedallah. (2015). The mediating role of burnout on the relationship of emotional intelligence and self-efficacy with ocb and performance. *Management Research Review*, *38*(1), 2–28.

Cohen, J. (1992). Statistical power analysis. *Current Direction in Psychological Science*, *1*(3), 98–101.

Cole, M. S., Bruch, H., & Vogel, B. (2006). Emotion as mediators of the relations between perceived supervisor support and psychological hardiness on employee cynicism. *Journal of Organizational Behaviour*, *27*(4), 463–484.

Coleman, V. I., & Borman, W. C. (2000). Investigating the Underlying Structure of the Citizenship Performance Domain. *Human Resource Management Review*, *10*(1), 25–44.

Correa, V. M. (2014). *The Impact of Role Stress, Self-efficacy, Organizational Support, And Supervisory Support on Performance in School-Based Mental Health Trainees*. Alliant International University.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (fourth Edi, Vol. 4). Pearson Education Inc.

Creswell, J. W. (2014). *Research design : qualitative, quantitative, and mixed methods approaches*. (V. Knight, Ed.), *Research design Qualitative quantitative and mixed methods approaches* (4th ed.). California: SAGE Publications, Inc.

Creswell, J. W., & Creswell, J. D. (2018). *Research Design* (5th Editio). Los Angeles: SAGE Publications, Inc.

Cropanzano, R., & Rupp, D. E. (2008). Social Exchange Theory and Organizational Justice: Job Performance, Citizenship Behaviors, Multiple Foci, and a Historical Integration of Two Literatures. In *Justice, Morality, and Social Responsibility* (pp. 63–99).

Cuepacs. (2010, November 25). Penjawat awam bermasalah perlu di atasi segera. *Berita Harian*.

Cuepacs. (2015, February 16). Gaji rendah jadi faktor culas. *Sinar Harian*.

Cun, X. (2012). Public service motivation and job satisfaction, organizational citizenship behavior: An empirical study based on the sample of employees in Guangzhou public sectors. *Chinese Management Studies*, *6*(2), 330–340.

Curry, C. D. (2016). *Exploring Vertical and Horizontal Dimensions of Individualism and Collectivism As Predictors of Organizational Citizenship Behavior*. Barry University.

D'Amato, A., & Zijlstra, F. R. H. (2008). Psychological climate and individual factors as antecedents of work outcomes. *European Journal of Work and Organizational Psychology*, *17*(1), 33–54.

Dai, Y. De, Hou, Y. H., Chen, K. Y., & Zhuang, W. L. (2018). To help or not to help: antecedents of hotel employees' organizational citizenship behavior. *International Journal of Contemporary Hospitality Management*, *30*(3), 1293–1313.

Dekas, K. H., Bauer, T. N., Welle, B., Kurkoski, J., & Sullivan, S. (2013). Organizational Citizenship behavior, version 2.0: A Review and Qualitative Investigation of OCBs for Knowledge Workers at Google and Beyond. *Academy of Management Perspectives*, *27*(3), 219–237.

Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work-home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behavior*, *64*(1), 131–149.

Demerouti, E., Bakker, A. B., & Gevers, J. M. P. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, *91*(October 2017), 87–96.

Demir, K. (2015). The Effect of Organizational Justice and Perceived Organizational Support on Organizational Citizenship Behaviors: The Mediating Role of Organizational Identification. *Eurasian Journal of Educational Research*, *15*(60), 131–148.

Duxbury, L., & Higgins, C. (1993). Interference between work and family: A status report on dual-career and dual-earner mothers and fathers. *Employee Assistance Quarterly*, *9*(3–4), 55–80.

Dysvik, A., & Kuvaas, B. (2013). Perceived job autonomy and turnover intention: The moderating role of perceived supervisor support. *European Journal of Work and Organizational Psychology*, *22*(5), 563–573.

Economic Planning Unit. (2015). *Eleventh Malaysia PLan 2016 - 2020*. Putrajaya. https://doi.org/10.1109/CLUSTR.2004.1392655

Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-Member Exchange and Affective Organizational Commitment: The Contribution of Supervisor's Organizational Embodiment. *Journal of Applied Psychology*, *95*(6), 1085–1103.

Eisenberger, R., Malone, G. P., & Presson, W. D. (2016). Optimizing Perceived Organizational Support to Enhance Employee Engagement. *Society for Human Resource Management*, 1–22.

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, *87*(3), 565–573.

Erdwins, C. J., Buffardi, L. C., Casper, W. J., & O'Brien, A. S. (2001). The Relationship of Women's Role Strain to Social Support, Role Satisfaction, and Self- Efficacy. *Family Relations*, *50*(3), 230–238.

Fathuma Hansiya Abdul Rauf. (2013). the Role Work Family Conflict Self Efficacy on the Negative Effect of Organizational Citizenship Behavior. *South East Asia Journal of Contemporary Business, Economics and Law*, *3*(1), 49–54.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160.

Fernandes, V. V. (2012). (Re)discovering the PLS approach in management science. *Management*, *15*(1), 101–123.

Fiksenbaum, L. M. (2014). Supportive work-family environments: implications for work-family conflict and well-being. *International Journal of Human Resource Management*, *25*(5), 653–672.

Ford, M. T., Heinen, B. A., & Langkamer, K. L. (2007). Work and family satisfaction and conflict: A meta-analysis of cross-domain relations. *Journal of Applied Psychology*, *92*(1), 57–80.

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobserved variables and Measurement Error. *Journal of Marketing Research*, *18*(1), 39–50.

Frone, M. R. (2003). Work-family balance. In *Handbook of occupational health psychology.* (pp. 143–162). Washington D. C.: American Psychological Association.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and Outcomes of Work-Family Conflict: Testing a Model of the Work-Family Interface. *Journal of Applied Psychology*, *77*(1), 65–78.

Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and Testing an Integrative Model of the Work– Family Interface. *Journal of Vocational Behavior*, *50*, 145–167.

Gallup. (2017). *State of the Global Workplace. Gallup News*.

Gangeswari Tangaraja, Roziah Mohd Rasdi, Maimunah Ismail, & Bahaman Abu Samah. (2015). Fostering knowledge sharing behaviour among public sector managers: a proposed model for the Malaysian public service. *Journal of Knowledge Management*, *19*(1), 121–140.

Gannouni, K., & Ramboarison-Lalao, L. (2018). Leadership and students' academic success: mediating effects of self-efficacy and self-determination. *International Journal of Leadership in Education*, *21*(1), 66–79.

George, J. M., & Brief, A. P. (1992). Feeling Good-Doing Good: A Conceptual Analysis of the Mood at Work-Organizational Spontaneity Relationship. *Psychological Bulletin*, *112*(2), 310–329.

Gibson, J. A., Grey, I. M., & Hastings, R. P. (2009). Supervisor support as a predictor of burnout and therapeutic self-efficacy in therapists working in ABA schools. *Journal of Autism and Developmental Disorders*, *39*(7), 1024–1030.

Glaser, W., & Hecht, T. D. (2013). Work-family conflicts, threat-appraisal, self-efficacy and emotional exhaustion. *Journal of Managerial Psychology*, *28*(2), 164–182.

Goodhue, D. L., Lewis, W., & Thompson, R. (2012). Does Pls Have Advantages for Small Sample Size or Non-Normal Data? *MIS Quarterly*, *36*(3), 981-A16.

Gould-Williams, J. S., Mostafa, A. M. S., & Bottomley, P. (2015). Public service motivation and employee outcomes in the egyptian public sector: Testing the mediating effect of person-organization fit. *Journal of Public Administration Research and Theory*, *25*(2), 597–622.

Gountas, S., Gountas, J., & Mavondo, F. T. (2014). Exploring the associations between standards for service delivery (organisational culture), co-worker support, self-efficacy, job satisfaction and customer orientation in the real estate industry. *Australian Journal of Management*, *39*(1), 107–126.

Graham, J. W. (1991). An essay on organizational citizenship behavior. *Employee Responsiblities and Rights Journal*, *4*(4), 249–270.

Graham, S., & Weiner, B. (1996). Theories and principles of motivation. *Handbook of Educational Psychology*, (January 1996), 63–84.

Grandey, A. A., & Cropanzano, R. (1999). The Conservation of Resources Model Applied to Work–Family Conflict and Strain. *Journal of Vocational Behavior*, *54*, 350–370.

Grant-Vallone, E. J., & Donaldson, S. I. (2001). Consequences of work-family conflict

on employee well-being over time. *Work and Stress*, *15*(3), 214–226.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of and Conflict Family Between Work and family roles. *The Academy of Management Review*, *10*(1), 76–88.

Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, *63*(3), 510–531.

Greenhaus, J. H., & Powell, G. N. (2003). When work and family collide: Deciding between competing role demands. *Organizational Behavior and Human Decision Processes*, *90*(2), 291–303.

Griep, R. H., Toivanen, S., van Diepen, C., Guimarães, J. M. N., Camelo, L. V., Juvanhol, L. L., … Chor, D. (2016). Work–Family Conflict and Self-Rated Health: the Role of Gender and Educational Level. Baseline Data from the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil). *International Journal of Behavioral Medicine*, *23*(3), 372–382.

Hair, Joe F, Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM : Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–151.

Hair, Joseph F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (Seventh Ed). Pearson Education Limited.

Hair, Joseph F., Ringle, C. M., Sarstedt, M., & Graph, P. L. S. (2012). Partial Least Squares: The Better Approach to Structural Equation Modeling? *Long Range Planning*, *45*(5–6), 312–319.

Hair, Joseph F, Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research : A Review of Past Practices and Recommendations for Future Applications. *Long Range Planning*.

Halbesleben, J. R. B., Harvey, J., & Bolino, M. C. (2009). Too Engaged? A Conservation of Resources View of the Relationship Between Work Engagement and Work Interference With Family. *Journal of Applied Psychology*, *94*(6), 1452–1465.

Halbesleben, J. R. B., Neveu, J.-P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR": Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management*, *40*(5), 1334–1364.

Hammer, L. B., Kossek, E. E., Bodner, T., & Crain, T. (2013). Measurement Development and Validation of the Family Supportive Supervisor Behavior Short-Form (FSSB-SF). *Journal of Occupational Health Psychology*, *18*(3), 285–296.

Handayani, S., Udin, Yuniawan, A., Wikaningrum, T., & Supriyati, S. (2018). Investigating the Link Between Transformational Leadership, Psychological Empowerment, Affective Commitment and Organizational Citizenship Behavior in the Pharmaceutical Sector of Indonesia. *International Journal of Pharmaceutical Sciences and Research*, *9*(2), 766–774.

Hao, J., Wu, D., Liu, L., Li, X., & Wu, H. (2015). Association between work-family conflict and depressive symptoms among Chinese female nurses: The mediating and moderating role of psychological capital. *International Journal of Environmental Research and Public Health*, *12*(6), 6682–6699.

Harvey, J., Bolino, M. C., & Kelemen, T. K. (2018). Organizational citizenship behavior in the 21st century: How might going the extra mile look different at the start of the new millennium? *Research in Personnel and Human Resources Management*, *36*, 51–110.

Haslam, D., Filus, A., Morawska, A., Sanders, M. R., & Fletcher, R. (2014). The Work–Family Conflict Scale (WAFCS): Development and Initial Validation of a Self-report Measure of Work–Family Conflict for Use with Parents. *Child Psychiatry and Human Development*, *46*(3), 346–357.

Haun, S., Steinmetz, H., & Dormann, C. (2011). Objective work-nonwork conflict: From incompatible demands to decreased work role performance. *Journal of Vocational Behavior*, *79*(2), 578–587.

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*, 451–470.

Hennessy, K. D., & Lent, R. W. (2008). Self-Efficacy for Managing Work–Family Conflict Validating the English Language Version of a Hebrew Scale. *Journal of Career Assessment*, *16*(3), 370–383.

Henseler, Jörg, Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135.

Henseler, Jorg, Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In *New Challenges to International Marketing* (Vol. 20, pp. 277–319). Howard House, Wagon Lane, Bingley, UK: Emerald Group Publishing Limited.

Hertzog, M. A. (2008). Considerations in Determining Sample Size for Pilot Studies. *Research in Nursing & Health*, *31*(4), 341–354.

Hobfoll, S. E. (1989). Conservation of resources - A new way at conceptualizing stress. *American Psychologist*, *44*(3), 513–524.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, *50*(3), 337–421.

Hobfoll, S. E. (2002). Social and Psychological Resources and Adaptation. *Review of General Psychology*, *6*(4), 307–324.

Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource Loss, Resource Gain, and Emotional Outcomes Among Inner City Women. *Journal of Personality and Social Psychology*, *84*(3), 632–643.

Hoobler, J. M., Hu, J., & Wilson, M. (2010). Do workers who experience conflict between the work and family domains hit a 'glass ceiling?': A meta-analytic examination. *Journal of Vocational Behavior*, *77*(3), 481–494.

Houle, L., Chiocchio, F., Favreau, O. E., & Villeneuve, M. (2009). Role conflict and well-being among employed mothers: the mediating effects of self-efficacy. *Gender in Management: An International Journal*, *24*(4), 270–285.

Houle, L., Chiocchio, F., Favreau, O. E., & Villeneuve, M. (2012). Role Conflict and Self-Efficacy Among Employed Parents: Examining Complex Statistical Interactions. *Gender, Work and Organization*, *19*(6), 592–614.

Hsu, B.-F., Chen, W.-Y., Wang, M.-L., & Lin, Y.-Y. (2010). Explaining supervisory support to work-family conflict: The perspectives of guanxi, LMX, and emotional intelligence. *Journal of Technology Management in China*, *5*(1), 40–54.

Hsu, Y. R. (2011). Work-family conflict and job satisfaction in stressful working environments: The moderating roles of perceived supervisor support and internal locus of control. *International Journal of Manpower*, *32*(2), 233–248.

Hu, J., & Liden, R. C. (2013). Relative Leader-Member Exchange Within Team Contexts: How and when Social Comparison Impacts Individual Effectiveness. *Personnel Psychology*, *66*(1), 127–172.

Huffman, A. H., Olson, K. J., O'Gara, T. C., & King, E. B. (2014). Gender role beliefs and fathers' work-family conflict. *Journal of Managerial Psychology*, *29*(7), 774–793.

Hyman, L., Lamb, J., & Bulmer, M. (2006). The Use of Pre-Existing Survey Questions : Implications for Data Quality. In *Proceedings of the European Conference on Quality in Survey Statistics* (pp. 1–8).

International Data Corporation. (2016). *Focusing on the Employee Segment of One for Higher Engagement and Productivity*. *IDC white paper*.

Jane Floretta Kuswardi, & Kristiana Haryanti. (2014). Hubungan Work Family Conflict (WFC) dengan Organizational Citizenship Behavior (OCB) pada Perawat Perempuan Rumah Sakit X di Semarang. *Psikodimensia*, *13*(2).

Jehad Mohammad, Farzana Quoquab Habib, & Mohmad Adnan Alias. (2011). Job Satisfaction and organisational citizenship behaviour: An empirical study at higher learning institutions. *Academy of Management Journal*, *16*(2), 149–165.

Jihad Mohammad, Farzana Quoquab, & Rosmini Omar. (2016). Factors Affecting Organizational Citizenship Behavior among Malaysian Bank Employees: The Moderating Role of Islamic Work Ethic. *Procedia - Social and Behavioral Sciences*, *224*(15 June 2016), 562–570.

Jim, T. W., Hi, B., Shing, L. K., Lin, O. S., Yasmin, S., & Kadar, S. (2013). The Factors Affecting Organizational Citizenship Behavior in Banking Industry. *International Journal of Management Sciences*, *1*(5), 178–192.

Joe F. Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, *26*(2), 106–121.

Johanim Johari, & Khulida Kirana Yahya. (2018). Organizational Structure, Work Involvement, and Job Performance of Public Servants. *International Journal of Public Administration*, *00*(00), 1–10.

Jones, A. M. (2009). *A Matter of Motive: The Role of Autonomy In The Relationship Between Organizational Citizenship Behavour And Work-family Conflict*.

Joseph F. Hair, J., Celsi, M., Ortinau, D. J., & Bush, R. P. (2017). *Essentials of marketing research* (Fourth Edi). New York: McGraw-Hill Education.

Joseph F. Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial least squares structural equation modeling (PLS-SEM)*. *Sage Publisher* (2nd ed.). SAGE Publications, Inc.

Joseph F. Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Sage Publisher* (2nd ed.). Thousand Oaks, California: SAGE Publications, Inc.

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., Rosenthal, R. A., & Rosenthal, A. R. (1964). *Organizational stress: Studies in role conflict and ambiguity. Administrative Science Quarterly* (Vol. 10). New York: Wiley.

Kao, R.-H. H. (2017). Task-oriented work characteristics, self-efficacy, and service-oriented organizational citizenship behavior: A cross-level analysis of the moderating effect of social work characteristics and collective efficacy. *Personnel Review*, *46*(4), 718–739.

Karakas, F., & Sarigollu, E. (2012). Benevolent Leadership: Conceptualization and Construct Development. *Journal of Business Ethics*, *108*(4), 537–553.

Karam, C. M. (2011). Good organizational soldiers: Conflict-related stress predicts citizenship behavior. *International Journal of Conflict Management*, *22*(3), 300–319.

Karatepe, O. M., & Olugbade, O. A. (2009). The effects of job and personal resources on hotel employees' work engagement. *International Journal of Hospitality Management*, *28*(4), 504–512.

Karolidis, D. (2016). *Organizational Citizenship Behavior in the Greek Public Sector*. University of Macedonia.

Kasa, M., & Zaiton Hassan. (2015). The Role of Flow between Burnout and Organizational Citizenship Behavior (OCB) among Hotel Employees in Malaysia. *Procedia - Social and Behavioral Sciences*, *211*(September), 199–206.

Kasa, M., & Zaiton Hassan. (2016). Flow Experience and Organizational Citizenship Behaviour among Hotel Employees: Moderating Effect of Socio-Cultural Factor. *Procedia - Social and Behavioral Sciences*, *224*(August 2015), 101–108.

Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, *9*(2), 131–146.

Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: a longitudinal investigation. *Journal of Occupational Health Psychology*, *4*(4), 337–346.

Keon, T. L. (1986). The Functions of the Executive. *Academy of Management Review*, *11*(2), 456–459.

Khadija Mushtaq, Mirza Ashfaq Ahmed, & Sami Ullah Warraich. (2014). A Study on Job Satisfaction, Motivation and Organizational Citizenship Behavior. *International Journal of Management Sciences and Business Research*, *3*(11), 1–12.

Khodabandeh, M., & Ardabili, F. S. (2015). The mediating role of organizational commitment and political skills in occupational self-efficacy and citizenship behavior of employees. *International Journal of Organizational Leadership*, *4*(1), 47–59.

Khurram Aziz, Muhammad Awais, Syed Shahbaz ul Hasnain, Muhammad Arslan, & Qadeer Rahat. (2017). Impact of Workplace Perception and Servant Leadership on Organizational Citizenship: The Mediating Role of Employee Cynicism. *International Journal of Research*, *4*(9).

Kim, H. J., Hur, W. M., Moon, T. W., & Jun, J. K. (2017). Is all support equal? The moderating effects of supervisor, coworker, and organizational support on the link between emotional labor and job performance. *Business Research Quarterly*, *20*(2), 124–136.

Kim, M., & Beehr, T. A. (2017). Self-Efficacy and Psychological Ownership Mediate the Effects of Empowering Leadership on Both Good and Bad Employee Behaviors. *Journal of Leadership and Organizational Studies*, *24*(4), 466–478.

Kim, S. (2006). Public service motivation and organizational citizenship behavior in Korea. *International Journal of Manpower*, *27*(8), 722–740.

Klein, R. H. (2007). *The " dark side " of OCB : Examining the relationship between citizenship behavior and work-to-family conflict*. University of South Florida.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (Third Edit, Vol. 156). New York: Guilford press.

Klotz, A. C., Bolino, M. C., Song, H., & Stornelli, J. (2018). Examining the nature, causes, and consequences of profiles of organizational citizenship behavior. *Journal of Organizational Behavior*, *39*(5), 629–647.

Koosvesheni, R. (2010). *An Investigation Into Work-Family Conflict in Females Occupying Lower-Level Jobs*. Nelson Mandela Metropolitan University.

Korsgaard, M. A., Meglino, B. M., Lester, S. W., & Jeong, S. S. (2010). Paying You Back or Paying Me Forward: Understanding Rewarded and Unrewarded Organizational Citizenship Behavior. *Journal of Applied Psychology*, *95*(2), 277–290.

Kossek, E. E., Pichler, S., Bodner, T., & Hammer, L. B. (2011). Workplace social support and work-family conflict: A meta-analysis clarifying the influence of general and work-family-specific supervisor and organizational support. *Personnel Psychology*, *64*(2), 289–313.

Kottke, J. L., & Sharafinski, C. E. (1988). Measuring Perceived Supervisory and Organizational Support. *Educational and Psychological Measurement*, *48*(4), 1075–1079.

Kumar, R. (2011). *Research Metholdology: a step by step guide for beguinners* (3rd Editio). California: SAGE Publications, Inc.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived Organizational Support: A Meta-Analytic Evaluation of Organizational Support Theory. *Journal of Management*, *43*(6), 1854–1884.

Ladebo, O. J. (2008). Perceived supervisory support and organisational citizenship behaviours: Is job satisfaction a mediator? *South African Journal of Psychology*, *38*(3), 479–488.

Ladyshewsky, R. K., & Taplin, R. (2018). The Interplay Between Organisational Learning Culture, The Manager as Coach, Self-Efficacy and Workload on Employee Work Engagement, *16*(2), 3–19.

Lai Wan Hooi. (2015). Relationship between organisational justice and organisational citizenship behaviour: Examining the mediating role of job satisfaction. *Management and Organization: Concepts, Tools and Applications*, (2008), 77–97.

Lambert, E. G., & Hogan, N. L. (2013). The Association of Distributive and Procedural Justice With Organizational Citizenship Behavior. *The Prison Journal*, *93*(3), 313–334.

Lambert, E. G., Kelley, T., & Hogan, N. L. (2013). Work-family conflict and organizational citizenship behaviors. *Journal of Crime and Justice*, *36*(3), 398–417.

Lau, P. Y. Y., McLean, G. N., Lien, B. Y.-H., & Hsu, Y.-C. (2016). Self-rated and peer-rated organizational citizenship behavior, affective commitment, and intention to leave in a Malaysian context. *Personnel Review*, *45*(3), 569–592.

Le, B. P., Lei, H., Phouvong, S., Than, T. S., Nguyen, T. M. A., & Gong, J. (2019). Self-Efficacy and Optimism Mediate the Relationship Between Transformational Leadership and Knowledge Sharing. *Social Behavior and Personality: An International Journal*, *46*(11), 1833–1846.

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, *87*(1), 131–142.

Leon-Perez, J. M., Medina, F. J., Munduate, L., Leon-Perez, J. M., Medina, F. J., & Munduate, L. (2011). Effects of self-efficacy on objective and subjective outcomes in transactions and disputes. *International Journal of Conflict Management*, *22*(2), 170–189.

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, *87*(1), 52–65.

Li, C., Lu, J., & Zhang, Y. (2013). Cross-Domain Effects of Work-Family Conflict on Organizational Commitment and Performance. *Social Behavior and Personality: An International Journal*, *41*(10), 1641–1653.

Li, M., Liu, Y., Liu, L., & Wang, Z. (2017). Proactive Personality and Innovative Work Behavior: the Mediating Effects of Affective States and Creative Self-Efficacy in Teachers. *Current Psychology*, *36*(4), 697–706.

Lim, L. K., Yee, P. H., Yan, Y. M., & Lin, Y. Y. (2014). *The Impact of Organizational Citizenship Behavior, Job Autonomy and Organizational Resources on Organizational Commitment in Private Schools of Malaysia*. Universiti Tunku Abdul Rahman.

Liu, J., Cho, S., & Eka Diraksa Putra. (2017). The moderating effect of self-efficacy and gender on work engagement for restaurant employees in the United States. *International Journal of Contemporary Hospitality Management*, *29*(1), 624–642.

Liu, Y., Wang, M., Chang, C.-H., Shi, J., Zhou, L., & Shao, R. (2015). Work-family conflict, emotional exhaustion, and displaced aggression toward others: the moderating roles of workplace interpersonal conflict and perceived managerial family support. *Journal of Applied Psychology*, *100*(3), 793–808.

Livingston, B. A., & Judge, T. A. (2008). Emotional Responses to Work-Family Conflict: An Examination of Gender Role Orientation Among Working Men and Women. *Journal of Applied Psychology*, *93*(1), 207–216.

Lizano, E. L., Hsiao, H.-Y., Mor Barak, M. E., & Casper, L. M. (2014). Support in the Workplace: Buffering the Deleterious Effects of Work–Family Conflict on Child Welfare Workers' Well-Being and Job Burnout. *Journal of Social Service Research*, *40*(2), 178–188.

Lloyd, K. J., Boer, D., Keller, J. W., & Voelpel, S. (2015). Is My Boss Really Listening to Me? The Impact of Perceived Supervisor Listening on Emotional Exhaustion, Turnover Intention, and Organizational Citizenship Behavior. *Journal of Business Ethics*, *130*(3), 509–524.

Lo, M.-C., & Ramayah, T. (2009). Dimensionality of Organizational Citizenship Behavior (OCB) in a Multicultural Society: The Case of Malaysia. *International Business Research*, *2*(1), 48–55.

López-Domínguez, M., Enache, M., Sallan, J. M., & Simo, P. (2013). Transformational leadership as an antecedent of change-oriented organizational citizenship behavior. *Journal of Business Research*, *66*(10), 2147–2152.

Lu, L., Kao, S.-F. F., Chang, T.-T. T., Wu, H.-P. P., & Cooper, C. L. (2008). Work/Family Demands, Work Flexibility, Work/Family Conflict, and Their Consequences at Work: A National Probability Sample in Taiwan. *International Journal of Stress Management*, *15*(1), 1–21.

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction Part of the Management Sciences and Quantitative Methods Commons. *Personnel Psychology*, *60*, 541–572.

Lyu, Y., Zhu, H., Zhong, H. J., & Hu, L. (2016). Abusive supervision and customer-oriented organizational citizenship behavior: The roles of hostile attribution bias and work engagement. *International Journal of Hospitality Management*, *53*, 69–80.

Maertz, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, *28*(8), 1059–1075.

Mahathir Mohamad. (2008). *The Way Forward*. Putrajaya.

Mahayudin, & Azahari, R. (2015). Relationship of Marital Satisfaction, Family Support and Family-Work Conflict Factors Among Malaysian Fathers with Adolescents. *Committee on Publication Ethics*, *5*(2), 19–30.

Mahipalan, M., Sheena, & Muhammed, S. (2019). Examining the Role of Workplace Spirituality and Teacher Self-efficacy on Organizational Citizenship Behaviour of Secondary School Teachers: An Indian Scenario. *Vision*, *23*(1), 80–90.

Majeed, N., Mohd Nor, M. N., & Mohd Mustamil, N. (2017). Exploring Relationship Between Transformational Leadership and Organizational Citizenship Behaviors Through Lens of Workplace Spirituality. *International Online Journal of Educational Leadership*, *1*(1), 5–33.

Malaysia Competitive Corporation. (2018). *Malaysian in the Global Competitive Report 2018*. Petaling Jaya.

Malhotra, N. K., & Birks, D. F. (2007). *Marketing Research: An Applied Approach. World Wide Web Internet And Web Information Systems* (Vol. 3).

Masterson, S. S., & Stamper, C. L. (2003). Perceived organizational membership: An aggregate framework representing the employee-organization relationship. *Journal of Organizational Behavior*, *24*(SPEC. ISS.), 473–490.

Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in Organizational Behavior. *Journal of Organizational Behavior*, *27*(8), 1031–1056.

Mathis, C. J., & Brown, U. J. (2008). Work-Family Conflict and Job Satisfaction: the Mediating Effects of Job-Focused Self-Efficacy. *Journal of Organizational Culture, Communication and Conflict*, *12*(1), 93–106.

Mazni Alias, Roziah Mohd Rasdi, Maimunah Ismail, & Bahaman Abu Samah. (2013). Predictors of workplace deviant behaviour: HRD agenda for Malaysian support personnel. *European Journal of Training and Development*, *37*(2), 161–182.

Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Convergence between measures of work-to-family and family-to-work conflict: A meta-analytic examination. *Journal of Vocational Behavior*, *67*(2), 215–232.

Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, *32*(5), 689–725.

Mohamad Noorman Masrek, Nur Izzati Yusof, Siti Arpah Noordin, & Rusnah Johare. (2013). Exploring the Relationship between Job Design and Knowledge Productivity: A Conceptual Framework in the Context of Malaysian Administrative and Diplomatic Officers. *Journal of Organizational Knowledge Management Journal of Organizational Knowledge Management*, *2013*(2013).

Mohammad, J., Quoquab, F., Makhbul, Z. M., & Ramayah, T. (2016). Bridging the gap between justice and citizenship behavior in Asian culture. *Cross Cultural and Strategic Management*, *23*(4), 633–656.

Mohammad Kazem Bighami, Heshmat Khalifesoltani, Farshid Abdi, & Mohsen Seyed Aliakbar. (2014). The behavioral model of emotional intelligence effect on work-family conflict and organizational citizenship behavior among nurses. *Organizational Behavior Studies Quarterly*, *3*(12).

Molines, M., Sanséau, P.-Y., & Adamovic, M. (2017). How organizational stressors affect collective organizational citizenship behaviors in the French Police: The moderating role of trust climate? *International Journal of Public Sector Management*, *30*(1), 48–66.

Motowidlo, S. J., & Schmit, M. J. (1999). Performance assessment in unique jobs. In P. (Eds.) (Ed.), *The changing nature of performance* (pp. 56-86.).

Muhamad Ariff Ibrahim, Wan Shahrazad Wan Sulaiman, Sarah Waheeda Muhammad Hafidz, & Siti Fardaniah Abd. Aziz. (2016). Pengaruh Iklim Organisasi Terhadap Tingkah Laku Kewargaan Organisasi Dalam Kalangan Penjawat Awam. *Journal of Social Sciences and Humanities*, *11*(2), 1–16.

Muhammad Sabbir Rahman, Mahafuz Mannan, Md Afnan Hossain, Mahmud Habib Zaman, & Hasliza Hassan. (2018). Tacit knowledge-sharing behavior among the academic staff: Trust, self-efficacy, motivation and Big Five personality traits embedded model. *International Journal of Educational Management*, *32*(5), 761–782.

Naail Mohammed Kamil, Mohamed Sulaiman, Sugumaran Selladurai, & Nadhira Khalid. (2015). The Impact of Spirituality and Social Responsibility on Organizational Citizenship Behaviour from the Islamic Perspective: Empirical Investigation of Malaysian Businesses. *Malaysian Journal of Communication*, *31*(1), 59–80.

Nahum-Shani, I., Henderson, M. M., Lim, S., & Vinokur, A. D. (2014). Supervisor support: Does supervisor support buffer or exacerbate the adverse effects of supervisor undermining? *Journal of Applied Psychology*, *99*(3), 484–503.

Naqshbandi, M. M., Garib Singh, S. K., & Ma, P. (2016). The link between organisational citizenship behaviours and open innovation: A case of Malaysian high-tech sector. *IIMB Management Review*, *28*(4), 200–211.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, *81*(4), 400–410.

Ng, T. W. H., & Feldman, D. C. (2012). The effects of organizational and community embeddedness on work-to-family and family-to-work conflict. *Journal of Applied Psychology*, *97*(6), 1233–1251.

Nguyen, B., Chang, K., Rowley, C., & Japutra, A. (2016). Organizational citizenship behavior, identification, psychological contract and leadership frames. *Asia-Pacific Journal of Business Administration*, *8*(3), 260–280.

Nicholls, J., Harvey, J., & Erdos, G. (2009). The concept of organizational supportiveness, *67*(2), 291–298.

Nik Nadian Nisa Nik Nazli, & Sheikh Muhamad Hizam Sheikh Khairudin. (2018). The factors that influence transfer of training and its effect on organizational citizenship behaviour: Evidence from Malaysia civil defence force. *Journal of Workplace Learning*, *30*(2), 121–146.

Nisula, A. M. (2015). The relationship between supervisor support and individual improvisation. *Leadership and Organization Development Journal*, *36*(5), 473–488.

Nohe, C., Meier, L. L., Sonntag, K., & Michel, A. (2014). The Chicken or the Egg ? A Meta-Analysis of Panel Studies of the Relationship Between Work – Family Conflict. *Journal of Applied Psychology*, *100*(2), 1–15.

Noor Alam Siddiquee. (2006). Public management reform in Malaysia: Recent initiatives and experiences. *International Journal of Public Sector Management*, *19*(4), 339–358.

Noore Alam Siddiquee. (2012). Public Management and Governance in Malaysia. In *Public Management and Governance in Malaysia: Trends and Transformations* (pp. 86–101).

Noraini Noor, & Nor Diana Mohd Mahudin. (2015). Work – life balance policies in Malaysia : theory and practice theory and practice. *Handbook of Research on Work–Life Balance in Asia*, (April).

Norasherin Basirudin, Rohaida Basiruddin, Mozhdeh Mokhber, Siti Zaleha Abdul Rasid, & Nor Aiza Mohd Zamil. (2016). Organizational Citizenship B e haviour in Public Sector : Does Job Satisfaction Play a Role. *International Journal of Economics and Financial Issues*, *6*(2014), 376–381.

Norfaizzah Ramlee, Abdullah Osman, Shahrul Nizam Salahudin, Sin Kit Yeng, Sim Choon Ling, & Muhammad Safizal. (2016). The Influence of Religiosity, Stress and Job Attitude towards Organizational Behavior: Evidence from Public Universities in Malaysia. *Procedia Economics and Finance*, *35*(October 2015), 563–573.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric Theory. *Psychometric Theory*.

Nunnaly, J. C. (1978). *Psychometric theory (2nd ed.)*. McGraw-Hill.

NurIzzaty Mohamad, Azman Ismail, Nurul Muna Mohamad, Sholihien Ahmad, & Zulkefli Yahya. (2016). Role Ambiguity and Role Overload As Important Predictors of Work-Family Conflict. *Humaniora*, 473–483.

Nurnazirah Jamadin, Samsiah Mohamad, Zurwina Syarkawi, & Fauziah Noordin. (2015). Work - Family Conflict and Stress: Evidence from Malaysia. *Journal of Economics, Business and Management*, *3*(2), 309–312.

Nwanzu, C. L., & Babalola, S. S. (2019). Examining psychological capital of optimism, self-efficacy and self-monitoring as predictors of attitude towards organizational change. *International Journal of Engineering Business Management*, *11*, 1–12.

O 'loughlin, C. R. (2016). *The Moderating Effects of Selection, Optimization, and Compensation on the Relationships Between Polychronicity and Work-Family Conflict, organizational Citizenship Behaviors, and Burnout.*

Ocampo, L., Acedillo, V., Bacunador, A. M., Balo, C. C., Lagdameo, Y. J., & Tupa, N. S. (2018). A historical review of the development of organizational citizenship behavior (OCB) and its implications for the twenty-first century. *Personnel Review*, *47*(4), 821–862.

Olson, K. J., Huffman, A. H., Leiva, P. I., & Culbertson, S. S. (2013). Acculturation and individualism as Predictors of Work-Family Conflict in a Diverse Workforce. *Human Resource Management, 52*(5), 741–769.

Opie, T. J., & Henn, C. M. (2013). Work-family conflict and work engagement among mothers: Conscientiousness and neuroticism as moderators. *Journal of Industrial Psychology*, *39*(1), 1–13.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational Citizenship Behavior: Its Nature, Antecedents and Consequences*. Thousand Oaks, California: SAGE Publications, Inc.

Ozyilmaz, A., Erdogan, B., & Karaeminogullari, A. (2017). Trust in organization as a moderator of the relationship between self-efficacy and workplace outcomes: A social cognitive theory-based examination. *Journal of Occupational and Organizational Psychology*, *91*(1), 181–204.

Paillé, P., Grima, F., & Bernardeau, D. (2013). When subordinates feel supported by managers: Investigating the relationships between support, trust, commitment and outcomes. *International Review of Administrative Sciences*, *79*(4), 681–700.

Pal, S., & Saksvik, P. Ø. (2008). Work-Family Conflict and Psychosocial Work Environment Stressors as Predictors of Job Stress in a Cross-Cultural Study. *International Journal of Stress Management*, *15*(1), 22–42.

Park, J., Sohn, Y. W., & Ha, Y. J. (2016). South Korean Salespersons' Calling, Job Performance, and Organizational Citizenship Behavior: The Mediating Role of Occupational Self-Efficacy. *Journal of Career Assessment*, *24*(3), 415–428.

Pasamehmetoglu, A., Guchait, P., Tracey, J. B., Cunningham, C. J. L., & Lei, P. (2017). The moderating effect of supervisor and coworker support for error management on service recovery performance and helping behaviors. *Journal of Service Theory and Practice*, *27*(1), 2–22.

Pati, S. P., & Kumar, P. (2010). Employee Engagement: Role of Self-efficacy, Organizational Support & Supervisor Support. *Indian Journal of Industrial Relations, 46*(1), 126–137.

Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management*, *12*(1), 43–61.

Peixu He, Xiaoling Wang, Ze Li, Mengying Wu, & Estay, C. (2018). Compulsory Citizenship Behavior and Employee Silence: The Roles of Emotional Exhaustion and Organizational Identification. *Social Behavior and Personality: An International Journal*, *46*(12), 2025–2047.

Peng Wang, Lawler, J. J., & Shi, K. (2010). Work-family conflict, self-efficacy, job satisfaction, and gender: Evidences from asia. *Journal of Leadership and Organizational Studies*, *17*(3), 298–308.

Pieter Sahertian. (2010). Perilaku Kepemimpinan Berorientasi Hubungan Dan Tugas Sebagai Anteseden Komitmen Organisasional, Self-Efficacy Dan Organizational Citizenship Behavior (OCB). *Jurnal Manajemen Dan Kewirausahaan*, *12*, pp.156-169.

Pócsi, I., Prade, R. A., & Penninckx, M. J. (2004). Glutathione, altruistic metabolite in fungi. *Advances in Microbial Physiology*, *49*(12), 1–76.

Podsakoff, N. P., Podsakoff, P. M., Mackenzie, S. B., Maynes, T. D., Whiting, S. W., & Spoelma, T. M. (2017). Multilevel Antecedents of Organizational Citizenship Behavior: A Review and Recommendations for Future Research. In P. M. Podsakoff, S. B. Mackenzie, & N. P. Podsakoff (Eds.), *The Oxford Handbook of Organizational Citizenship Behavior* (pp. 1–88). Oxford University Press.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and Organizational-Level Consequences of Organizational Citizenship Behaviors: A Meta-Analysis. *Journal of Applied Psychology*, *94*(1), 122–141.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, *26*(3), 513–563.

Polizzi, J. V. (2009). The effects of supervisory support, age and gender on self efficacy and metacognitive activity in a learner controlled training environment. *Dissertation Abstracts International Section B The Sciences and Engineering*, *69*(October).

Preacher, K. J., & Hayes, A. F. (2008a). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891.

Preacher, K. J., & Hayes, A. F. (2008b). The multivariate delta method for deriving the asymptotic variance of a total indirect effect with three mediators.

Premalatha, J. J. R. (2014). Influence of demographic profile on acceptance of internet banking in a non metro city in Tamil Nadu, India an empirical study. *Journal of Internet Banking and Commerce*, *19*(3), 1–15.

Priyankara, H. P. R., Luo, F., Saeed, A., Nubuor, S. A., & Jayasuriya, M. P. F. (2018). How does leader's support for environment promote organizational citizenship behaviour for environment? A multi-theory perspective. *Sustainability (Switzerland)*, *10*(1).

Public Complaint Bureau. (2018). *Complaint Statistics from 1 January - 31 December 2018*. Putrajaya.

Public Sector Transformation Division. (2014). *Transforming Public Service in Malaysia: Guidelines for Developing a Transformation Plan*. *Public Service Department*. Retrieved on 9 April 2019 from http://portaladmin.jpa.gov.my/index.php?option=com_content&view=article&id=3014&Itemid=986&lang=en

Public Service Commission. (2019). Deskripsi Tugas Pegawai Tadbir Diplomatik M41.

Qureshi, H. (2015). *A Study of Organizational Citizenship Behaviors (OCB) and its Antecedents in an Indian Police Agency*. University of Cincinnati.

Rabenu, E., Tziner, A., & Sharoni, G. (2017). The relationship between work-family conflict, stress, and work attitudes. *International Journal of Manpower*, *38*(8), 1143–1156.

Raineri, N., & Paillé, P. (2016). Linking Corporate Policy and Supervisory Support with Environmental Citizenship Behaviors: The Role of Employee Environmental Beliefs and Commitment. *Journal of Business Ethics*, *137*(1), 129–148.

Randhawa, G., & Kaur, K. (2015). An Empirical Assessment of Impact of Organizational Climate on Organizational Citizenship Behaviour. *Paradigm*.

Rashidah Mohamad Ibrahim, Aziz Amin, & Munir Salleh. (2014). The role of leader-member exchange in elevating local government employees' organizational citizenship behavior: An empirical evidence from East Coast Malaysia. *International Journal of Business and Social Science*, *5*(6(1)), 161–170.

Rashidah Mohamad Ibrahim, Mazuri Abd. Ghani, Noorul Hafizah Hashim, Aziz Amin, & Munir Salleh. (2016). Organizational citizenship behavior evaluation: Insights from Local Government Agency in Malaysia. *International Business Management*.

Rashidah Mohamad Ibrahim, Mazuri Abdul Ghani, & Ahmad Munir Mohd Salleh. (2013). Elevating organizational citizenship behavior among local government employees: The mediating role of job satisfaction. *Asian Social Science*, *9*(13), 92–104.

Rashidah Mohamad Ibrahim, Mazuri Abdul Ghani, & Ahmad Munir Mohd Salleh Embat. (2013). Organizational Citizenship Behavior among Local Government Employees in East Coast Malaysia: A Pilot Study. *International Business Research*, *6*(6), 83–94.

Reizer, A., & Hetsroni, A. (2015). Caregiving Representations at Work and the Moderating Role of Job Self-Efficacy. *Psychological Reports*, *116*(1), 60–73.

Rhee, S. Y., Hur, W. M., & Kim, M. (2017). The Relationship of Coworker Incivility to Job Performance and the Moderating Role of Self-Efficacy and Compassion at Work: The Job Demands-Resources (JD-R) Approach. *Journal of Business and Psychology*, *32*(6), 711–726.

Rigdon, E. E., Ringle, C. M., & Sarstedt, M. (2010). Structural modeling of heterogeneous data with partial least squares. *Review of Marketing Research*, *7*, 255–296.

Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. *Journal of Career Assessment*, *16*(2), 238–255.

Ringle, C. M., Wende, S., & Becker, J. M. (2015). SmartPLS 3. Boenningstedt.

Romle, A. R., Faezah, N., Talib, M., Sabrina, N., & Shahuri, S. (2016). The relationship between organizational citizenship behavior and high performance organization from the perspective of the students in the higher education institution in Malaysia. *Journal of Scientific Research and Development*, *3*(5), 37–42.

Rose, K., Herd, A., & Palacio, S. (2017). Organizational Citizenship Behavior: An Exploration of One Aspect of Cultural Adjustment Faced by U.S. Army Soldiers Transitioning From Military to Civilian Careers. *Advances in Developing Human Resources*, *19*(1), 14–24.

Rosli, M. H., Aziz, M. A. A., Mohd, F., & Said, J. (2015). Integrity Systems in Malaysian Public Sector: An Empirical Finding. In *7th International Conference on Financial Criminology 2015* (Vol. 28, pp. 260–265). Elsevier B.V.

Rubin, R. G. (2013). *Organizational Citizenship Behavior in the Public Library and Its Relationship to Leader-Member Exchange and Perceived Supervisor Support*. Simmons College. Retrieved on 9 April 2019 from https://pqdtopen.proquest.com/doc/1527494178.html?FMT=AI

Rusli Ahmad, & Nur Azman Ali. (2004). Performance appraisal decision in Malaysian public service. *International Journal of Public Sector Management*, *17*(1), 48–64.

Sabitha Marican, & Surena Sabil. (2017). Family- Friendly Policies As an Organizational Support To Overcome Work- Family Conflict. *Journal of Social Administration*, *9*(1), 1–18.

Saira Iqbal Khan, Atif Mahmood, Sara Kanwal, & Yasir Latif. (2015). How Perceived Supervisor Support Effects Workplace Deviance? Mediating Role of Perceived Organizational Support. *Pakistan Journal of Commerce and Social Sciences*, *9*(3), 940–967.

Salas-Vallina, A., Alegre, J., & Fernandez, R. (2017). Happiness at work and organisational citizenship behaviour: Is organisational learning a missing link? *International Journal of Manpower*, *38*(3), 470–488.

Salehzadeh, R., Shahin, A., Kazemi, A., & Barzoki, A. S. (2015). Is organizational citizenship behavior an attractive behavior for managers? A Kano model approach. *Journal of Management Development*, *34*(5), 601–620.

Sanaz Aazami, Khadijah Shamsuddin, & Syaqirah Akmal. (2015). Examining Behavioural Coping Strategies as Mediators between Work-Family Conflict and Psychological Distress. *Scientific World Journal*, *2015*.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2014). PLS-SEM: Looking Back and Moving Forward. *Long Range Planning*, *47*(3), 132–137.

Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Jr., J. F. H. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*.

Saunders, M., & Lewis, P. (2012). *Doing Research in Business & Management: An Essential Guide to Planning Your Project*.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students. World Wide Web Internet And Web Information Systems* (fifth Edit). Pearson Education Limited.

Schwoerer, C. E., May, D. R., Hollensbe, E. C., & Mencl, J. (2005). General and specific self-efficacy in the context of a training intervention to enhance performance expectancy. *Human Resource Development Quarterly*, *16*(1), 111–129.

Seemi Azam, & Kumar, R. (2016). Influence of Human Resource management Practices on Organizational Citizenship Behaviour. *International Journal of Research in Commerce & Management*, *7*(12), 45–50.

Sekaran, U. (2003). *Research Method for Business; A Skill Building Approach. Research methods for business*. John Wiley & Sons, Inc.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (Seventh Ed). United Kingdom: John Wiley & Sons, Inc.

Shafazawana Mohamed Tharikh, Cheah, Y. Y., Zuliawati Mohamed Saad, & Kavitha Sukumaran. (2016). Managing Job Attitudes: The Roles of Job Satisfaction and Organizational Commitment on Organizational Citizenship Behaviors. *Procedia Economics and Finance*, *35*(October 2015), 604–611.

Shahnawaz, M. G., Jafri, M. H., & Hassan, M. (2009). Psychological Capital as Predictors of Organizational Commitment and Organizational Citizenship Behaviour. *Journal of the Indian Academy of Applied Psychology*, *35*(October), 78–84.

Shaiful Annuar Khalid, & Hassan Ali. (2006). The lmportance of Organizational Citizenship Behaviour Among Hotel Employees. *Jumal Intelek*, *4*(1).

Shaiful Annuar Khalid, Hassan Ali, Mohammad Ismail, Norshimah Abdul Rahman, Kamsol Mohamed Kassim, & Rozihana Shekh Zain. (2009). Organizational citizenship behavior factor structure among employees in hotel industry. *2International Journal of Psychological Studies*, *1*(1), 16–25.

Sharifah Hayaati Syed Ismail. (2011). Role and transition of public service in Malaysia: An effective governance perspective. *African Journal of Business Management*, *5*(5), 1963–1974.

Sharma, J., Bajpai, N., & Holani, U. (2011). Organizational Citizenship Behavior in public and private sector and its impact on job satisfaction: a comparative study in indian perspective. *International Journal of Business and Management*, *6*(1), 67–75.

Shim, D. C. (2011). *Antecedents of government employees' organizational citizenship behavior: The impactsof prosocial orientation, organizational identification and subjective OCB norms*. State University of New York.

Shim, D. C., & Faerman, S. (2015). Government Employees' Organizational Citizenship Behavior: The Impacts of Public Service Motivation, Organizational Identification, and Subjective OCB Norms. *International Public Management Journal*, *20*(4), 531–559.

Shim, D. C., & Rohrbaugh, J. (2014). An Explanation of Differences between Government Offices in Employees' Organizational Citizenship Behavior. *Public Management Review*, *16*(6), 807–829.

Shockley, K. M., & Singla, N. (2011). Reconsidering work-family interactions and satisfaction: A meta-analysis. *Journal of Management*, *37*(3), 861–886.

Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology*, *20*(3), 285–304.

Siti Nabiha Abdul Khalid. (2008). New Public Management in Malaysia: In Search of An Efficient and Effective Service Delivery. *Ijms*, *15*(Bumper Issue), 69–90.

Siti Nur Hidayah Ibrahim, Choo Ling Suan, & Osman M. Karatepe. (2019). The effects of supervisor support and self-efficacy on call center employees' work engagement and quitting intentions. *International Journal of Manpower*.

Siti Rohana, Fatimah wati Halim, Mohamad Irwan, & Zulanefa Zulkepli. (2014). Personaliti Lima Faktor: Pengaruhnya terhadap Nilai Peribadi Asas dalam Kalangan Pegawai Tadbir Diplomatik. *Seminar Psikologi Malaysia*, (April), 0–13.

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*(4), 653–663.

Smoktunowicz, E., & Cieślak, R. (2017). How job and family demands impact change in perceived stress: A dyadic study. *International Journal of Occupational Medicine and Environmental Health*, *31*(2), 199–215.

Smoktunowicz, E., Cieslak, R., & Demerouti, E. (2017). Interrole conflict and self-efficacy to manage work and family demands mediate the relationships of job and family demands with stress in the job and family domains. *Anxiety, Stress and Coping*, *30*(5), 485–497.

Sofiah Kadar Khan, Mohd Zabid Haji Abdul Rashid, & Lionel Keith Vytialingam. (2016). The role of organisation commitment in enhancing organisation citizenship behaviour: A study of academics in malaysian private universities. *International Journal of Economics and Management*, *10*(2), 221–239.

Somech, A., & Drach-Zahavy, A. (2000). Understanding extra-role behavior in schools: The relationships between job satisfaction, sense of efficacy, and teachers' extra-role behavior. *Teaching and Teacher Education*, *16*(5), 649–659.

Stetz, T. A., Stetz, M. C., & Bliese, P. D. (2006). The importance of self-efficacy in the moderating effects of social support on stressor–strain relationships. *Work & Stress*, *20*(1), 49–59.

Streiner, D., Norman, G., & Cairney, J. (2014). *Health measurement scales: a practical guide to their development and use* (5th editio). oxford: Oxford University Press.

Surena Sabil, & Sabitha Marican. (2011). Working Hours, Work-family Conflict and Work-family Enrichment Among Professional Women: A Malaysian Case. *International Conference on Social Science and Humanity*, *5*, 206–209.

Syukri Sanali, Arsiah Bahron, & Dousin, O. (2013). Job Rotation Practices, Stress and Motivation: An Empirical Study among Administrative and Diplomatic Officers (ADO) in Sabah, Malaysia. *IRACST- International Journal of Research in Management & Technology (IJRMT)*, *3*(6), 160–166.

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics*. Edinburgh: Pearson Education Limited.

Talat Islam, Mubbsher Munawar Khan, & Fida Hussain Bukhari. (2016). The role of organizational learning culture and psychological empowerment in reducing turnover intention and enhancing citizenship behavior. *The Learning Organization*, *23*(2–3), 156–169.

Talat Islam, Saif ur Rehman Khan, Azam Shafiq, & Ungku Norulkamar Ungku Ahmad. (2012). Leadership, citizenship behavior, performance and organizational commitment: The mediating role of organizational politics. *World Applied Sciences Journal*, *19*(11), 1540–1552.

Tan, J. X., Dahlia Zawawi, & Yuhanis Abdul Aziz. (2016). Benevolent Leadership and Its Organisational Outcomes: A Social Exchange Theory Perspective. *Int. Journal of Economics and Management*, *10*(2), 343–364.

Tang, S. wen, Siu, O. ling, & Cheung, F. (2014). A study of work-family enrichment among chinese employees: The mediating role between work support and job satisfaction. *Applied Psychology*, *63*(1), 130–150.

Tang, Y.-T., & Chang, C.-H. (2010). Impact of Role Ambiguity and Role Conflict on Employee Creativity. *African Journal of Business Management*, *4*(6), 869–881.

Tang, Y.-Y., & Tsaur, S.-H. (2016). Supervisory support climate and service-oriented organizational citizenship behavior in hospitality: The role of positive group affective tone. *International Journal of Contemporary Hospitality Management*, *28*(10), 2331–2349.

Taylor, J. (2013). Goal Setting in the Australian Public Service: Eff ects on Psychological Empowerment and Organizational Citizenship Behavior. *Public Administration Review*, *73*, 453–464.

Taylor, J. (2016). Working Extra Hours in the Australian Public Service: Organizational Drivers and Consequences. *Review of Public Personnel Administration*, *38*(2), 193–217.

Ten Brummelhuis, L. L., & Van der Lippe, T. (2010). Effective work-life balance support for various household structures. *Human Resource Management*, *49*(2), 173–193.

Tennakoon, U. S. (2015). The Relationship Between ICT use and Work / Family Conflict: Moderation Effect of ICT perception. *Proceeding of International Conference on Contemporary Management*, *2015*, 665–677.

Testa, F., Corsini, F., Gusmerotti, N. M., & Iraldo, F. (2018). Predictors of organizational citizenship behavior in relation to environmental and health & safety issues. *The International Journal of Human Resource Management*, *5192*(January), 1–34.

The Star Online. (2019, July 10). World Bank: Efficiency of Malaysia's civil service has stagnated. *World Bank*.

Tjiptoherijanto, P. (2012). *Civil service reform in Malaysia: Commitment and consistency* (Vol. II).

Tremblay, M., & Gibson, M. (2016). The Role of Humor in the Relationship Between Transactional Leadership Behavior, Perceived Supervisor Support, and Citizenship Behavior. *Journal of Leadership and Organizational Studies*, *23*(1), 39–54.

Tsang, K. K. (2012). The use of midpoint on Likert Scale: The implications for educational research. *Hong Kong Teachers' Centre Journal*, *11*, 121–130.

Tsionou, T., & Konstantopoulos, N. (2015). The Complications and Challenges of the Work-family Interface: A Review Paper. *Procedia - Social and Behavioral Sciences*, *175*, 593–600.

Tziner, A., & Sharoni, G. (2014). Organizational citizenship behavior, organizational justice, job stress, and work- family conflict: Examination of their interrelationships with respondents from a non-Western culture. *Journal of Work and Organizational Psychology*, *30*(1), 35–42.

Ugwu, F. O., Amazue, L. O., & Onyedire, N. G. (2017). Work-family life balance in a nigerian banking sector setting. *Cogent Psychology*, *4*(1), 1–9.

Umair Ahmed, Waheed Ali Umrani, Munwar Hussain Pahi, & Syed Mir Muhammad Shah. (2017). Engaging Ph.D. Students: Investigating the Role of Supervisor Support and Psychological Capital in a Mediated Model. *Iranian Journal of Management Studies*, *10*(2), 283–306.

Ung Hee Lee, Hye Kyoung Kim, & Young Hyung Kim. (2013). Determinants of organizational citizenship behavior and its outcomes. *Global Business and Management: An International Journal*, *5*(1), 54–65.

Van Dyne, L., Cummings, L. L., & McLean Parks, J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). In *Research in Organizational Behavior* (Vol. 17, pp. 215–285).

Vigoda-Gadot, E. (2006). Compulsory citizenship behaviour: Theorizing some dark sides of the good soldier syndrome in organizations. *Journal of the Theory of Social Behaviour*, *36*, 77–93.

Vigoda-Gadot, E., & Beeri, I. (2011). Change-oriented organizational citizenship behavior in public administration: The power of leadership and the cost of organizational politics. *Journal of Public Administration Research and Theory*, *22*(3), 573–596.

Vigoda, E., & Golembiewski, R. T. (2001). Citizenship Behavior and the Spirit of New Managerialism: A Theoretical Framework and Challenge for Governance. *American Review of Public Administration*, *31*(3), 273–295.

Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, *44*(1), 119–134.

Wai, Y. S., Bojei, J., Osman, S., & Hashim, N. H. (2018). Perceived self-efficacy and its role in fostering pro-environmental attitude and behaviours. *Asian Journal of Business and Accounting*, *11*(2), 151–186.

Walumbwa, F. O., Hartnell, C. A., & Oke, A. (2010). Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes, and Organizational Citizenship Behavior: A Cross-Level Investigation. *Journal of Applied Psychology*, *95*(3), 517–529.

Wang, D., & Li, B. C. (2008). Effects of supervisory support and family-friendly benefit on work-family conflict. *2008 International Conference on Management Science and Engineering 15th Annual Conference Proceedings, ICMSE*, 1039–1044.

Wang, I.-A., Lee, B.-W., & Wu, S.-T. (2017). The relationships among work-family conflict, turnover intention and organizational citizenship behavior in the hospitality industry of Taiwan. *International Journal of Manpower*, *38*(8), 1130–1142.

Wang, L., Hinrichs, K. T., Prieto, L., & Howell, J. P. (2013). Five dimensions of organizational citizenship behavior: Comparing antecedents and levels of engagement in China and the US. *Asia Pacific Journal of Management*, *30*(1), 115–147.

Wang, Z. (2014). Perceived Supervisor Support and Organizational Citizenship Behavior : The Role of Organizational Commitment. *International Journal of Business and Social Science*, *5*(1), 210–214.

Wattoo, M. A., Zhao, S., & Xi, M. (2018). Perceived organizational support and employee well-being: Testing the mediatory role of work–family facilitation and work–family conflict. *Chinese Management Studies*, *12*(2), 469–484.

Whiston, S. C., & Cinamon, R. G. (2015). The work-family interface: Integrating research and career counseling practice. *Career Development Quarterly*, *63*(1), 44–56.

Whitman, D. S., Van Rooy, D. L., & Viswesvaran, C. (2010). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology*, *63*(1), 41–81.

Wiener, S. (2005). *Role Conflict, Role Ambiguity and Self-Efficacy Among School Social Workers*. Adelphi University.

William, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, *17*(3), 601.

Wong, K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, *24*.

Wu, T. Y., Lee, S. J., Hu, C., & Yang, C. C. (2014). When Supervisors Perceive Non-Work Support: Test of a Trickle-Down Model. *Journal of Psychology: Interdisciplinary and Applied*, *148*(2), 215–251.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, *14*(2), 121–141.

Xerri, M. J., & Brunetto, Y. (2013). Fostering innovative behaviour: The importance of employee commitment and organisational citizenship behaviour. *International Journal of Human Resource Management*, *24*(16), 3163–3177.

Xia, N., Zhong, R., Wang, X., & Tiong, R. (2018). Cross-domain negative effect of work-family conflict on project citizenship behavior: Study on Chinese project managers. *International Journal of Project Management*, *36*(3), 512–524.

Yadav, M., & Rangnekar, S. (2015). Supervisory support and organizational citizenship behavior: Mediating role of participation in decision making and job satisfaction. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, *3*(3), 258–278.

Yaghmale, F. (2003). Content validity and its estimation. *Journal of Medical Education*, *3*, 25–27.

Yahaya, A., Boon, Y., Ramli, J., Baharudin, N. A., Yahaya, N., Ismail, J., & Shariff, Z. (2011). The implications of Organizational Citizenship Behavior (OCB) towards the dimensions of Learning Organization (LO) in organizations in Southern Malaysia. *African Journal of Business Management*, *5*(14), 5724–5737.

Yang, C., Ding, C. G., & Lo, K. W. (2016). Ethical Leadership and Multidimensional Organizational Citizenship Behaviors. *Group & Organization Management*, *41*(3), 343–374.

Yu, K., Wang, Z., & Huang, Y. (2018). Work-family conflict and organizational citizenship behavior : the role of job satisfaction and decision authority. *Frontiers of Business Research in China*, *12*(17), 1–13.

Zellars, K. L., Hochwarter, W. A., Perrewe, P. L., Miles, A. K., & Kiewitz, C. (2001). Beyond Self-Efficacy: Interactive Effects Of Role Conflict And Perceived Collective Efficacy. *Journal of Managerial Issues*, *13*(4), 483–499.

Zhang, X. C., Siu, O. L., Hu, J., & Zhang, W. (2014). Relationships between bidirectional work-family interactions and psychological well-being: A three-wave cross-lagged study in China. *Journal of Personnel Psychology*, *13*(2), 87–96.

Zhao, X., Jr., J. G. L., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, *37*(2), 197–206.

Zhou, H., & Liu, T.-T. (2018). I Perform Well Because of My Admirable Supervisor: Exploring the Relationship between Admiration, Self-efficacy, and Organizational Citizenship Behavior. In *2018 International Conference on E-commerce and Contemporary Economic Development (ECED 2018)* (pp. 231–235).

Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2010). *Business Research Methods Eight Edition*. *Cengage Learning.*

Zimmerman, B. J. (2000). Self-Efficacy: An Essential Motive to Learn. *Contemporary Educational Psychology*, *25*, 82–91.

Zorlu, K. (2012). The perception of self-esteem and self-efficacy as transforming factors in the sources of role stress and job satisfaction relationship of employees: A trial of a staged model based on the artificial neural network method. *African Journal of Business Management*, *6*(8), 3014–3025.

Zubair Akram, Muhammad Naeem Shahid, Zafar Iqbal, & Hafiza Rabia Akram. (2019). How Self-Efficacy Influences Knowledge Sharing and Organizational Citizenship Behavior: A Social Approach Form Employees of Pharmaceutical Companies. *Indo American Journal of Pharmaceutical Scoences*, *6*(1), 643–651.

Zulkosky, K. (2009). Self - Efficacy : A Concept Analysis. *Nursing Forum*, (April 2009).

LIST OF PUBLICATIONS

Publications

Meor Rashydan Abdullah, & Sabitha Marican. (In Press). Supervisory support and Organisational Citizenship Behaviour: The role of self-efficacy as mediator. *International Journal of Public Sector Performance Management*.

Meor Rahsydan Abdullah. (2018). A Study of Demographic Characteristics and Work-family Conflict among Malaysians in the Public Sector. *International Jorunal for Studies on Children, Women, Elderly And Disabled*, *5*(Oct.), 228–235.

Meor Rashydan Abdullah, Sabitha Marican, & Nurul Liyana Mohd Kamil. (2019). The Antecedents of Organizational Citizenship Behavior : A Conceptual Framework. *Journal of Advanced Research in Social and Behavioural Sciences*, *15*(1), 1–14.

Meor Rashydan Abdullah, Sabitha Marican, & Nurul Liyana Mohd Kamil. (2019). The Mediating Role of Self-efficacy on the Relationship between work-family conflict and organisational citizenship behaviour. *Journal of Nusantara Studies*, *4*(1), 246–272.