Project manager personality traits towards project success: Moderated role of working experience in perspectives of small public construction projects in Malaysia

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ABSTRACT

Project success requires organisations and project managers to change strategies to satisfy stakeholders. Research into project success needs comprehensive analysis and approaches in various contexts, especially touching on non-technical skills (personality). This study aims to focus on examining the association of Project Manager Personality Traits (PMPTs) to the success of Small Public Construction Projects (SPCPs) and moderated by working experience. A survey was carried out to collect data using a structured Big Five Inventory (BFI) and Project Success Achieved Instrument (PSAI) questionnaire. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used on a sample of 137 respondents for hypotheses testing and moderation effect analysis. Results show that PMPTs had a positive impact on the success of SPCPs. Conscientiousness (CT) and Agreeableness (AG) traits influence were more prominent when compared with other traits. While working experience does not moderate the relationship between PMPTs and the success of SPCPs. This study reflected the theoretical research of personality traits and their impact on the construction management industry. There have been limited studies of project success in the relationship with the BFI in the past, especially in the SPCPs context. The present study provides a basis for researchers interested in this area to examine further the use of BFI and PSAI as resources in other industries. Practically these findings may enable government or authorities to better align and suit project managers and their assigned project-based levels, where project managers are located in ministries overseeing small-scale projects. This study contributes theoretically to SPCPs literature by offering insights into project manager personality affecting project success and focus on selected agency in Malaysia.

KEYWORDS: Public project management, Small public construction projects, Project manager, Big five inventory, Project success, Work experience.

INTRODUCTION

The emergence of new challenges resulting from the demand of stakeholders has generated an increasingly competitive environment and demand for higher-quality public services. Machado and Martens (2015 described project management as the primary method for an organisation to establish its mission of achieving its goal effectively. The key recipe for success in project management is based on the planning, coordination and execution of a complete project (Project Management Institute, 2013). Touching on the success factors of projects, Belassi and

Tukel (1996) claim that one of the main important attributes that contribute to success is a project manager. Therefore, the management of construction projects is no exception in contributing to the effective delivery of services. The project manager's non-technical skills are a significant factor in determining the success of this industry (Cheong & Mustaffa, 2017). However, past research on project management has paid little attention to the psychological factors leading to projects' success (Hassan, Bashir & Abbas, 2017). Many of the researchers' findings have shown that soft skills (psychological) contribute more than technical skills to the project's success. However, the study's emphasis is still less on these skills, particularly the project manager's personality (Esa, 2015). This is also supported by Thal and Bedingfield (2010), stressing the value of a comprehensive examination of how personality traits play a key role in project success. In a different perspective, Ceric (2014) reported that working experience plays a major role in the success of project managers. This also supported by Paton and Hodgson (2016), who claimed that project managers' experience influences their knowledge, training, and overall project success.

Thus, the study aims to fill the gaps by identifying the relationship between the project manager personality traits (PMPTs) and the success of Small Public Construction Projects (SPCPs). Besides, this study also examines the role of moderating effects of working experience on the relationship of the independent variable in PMPTs and the SPCPs success. The findings will help academicians to understand project manager's personality traits that influence the SPCPs success, moderated by working experience to further enhance understanding of the current scenario of the local construction industry.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Project Manager and Small Public Construction Projects (SPCPs)

According to Project Management Institute (2013), the person responsible for setting realistic project boundaries in accordance with the guidelines is under the responsibility of the project manager. This includes one of the key tasks that a project manager can take to deal effectively with unforeseen circumstances (Jabar, Ismail, Aziz, & Aziz, 2014). In this respect, project managers must master technical and non-technical (soft) skills to allow development to progress without interrupting the main cycle processes of the project (Esa, 2015). Meanwhile, according to Müller and Jugdev (2012), the success of the project is influenced by personalities, teamwork and organisational interaction. This is also supported by studies carried out by Ali and Chileshe (2009), that the expertise, experience, knowledge and understanding of a project manager affect the success of the whole project. Therefore, it is clear that there is a need for a project manager with a wide range of skills (technical/soft), integrity, competence, and knowledge in managing public funds entrusted with a more strategic direction.

Nowadays, the public sector focuses more on cost minimisation and stakeholder satisfaction, while the private sector is centred on increasing productivity and consumer satisfaction (Toor & Ogunlana, 2010). Several attempts have been made from the Malaysian perspective to identify appropriate success measures that could be used to improve the performance of public projects, includes as per Takim and Adnan (2008), productivity assessments are related to project results achieved during the construction process and define five main factors: customer satisfaction, goals of stakeholders, learning and exploiting, operating guarantee and user satisfaction. Meanwhile, Maimun (2010) has studied the critical factors of project success for the public sector and discovered that four key criteria are the steps to be taken: time, cost,

quality, and stakeholders. Moreover, project success is a major concern for the government in the public sector, as a significant number of stakeholders are affected if the development target is not met (Ozguler, 2016).

This study focuses on SPCPs, i.e. projects worth RM500 thousand and below. These projects are characterised by a short period of implementation consisting of a small team, low cost, and a balance by project managers to achieve effective coordination. (Kementerian Kewangan Malaysia, 2011; 2014; Unit Penyelarasan Pelaksanaan, 2015). Whereas the duration of implementation of the SPCPs is usually between 1 and 3 months or up to 6 months, depending on the type and complexity of the project (Kementerian Kewangan Malaysia, 2011). Examples of SPCPs include maintenance projects, hall construction, drainage, renovation/construction of new village roads, streetlights, bridges/suspension bridges and public/basic infrastructure upgrades.

Personality Traits and Project Success

Essentially, personality traits defined as "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (Mccrae & Costa, 1987). In a wider context, a lot of what psychologists mean by "personality" is summed up by Five-Factor Model (FFM). By incorporating and systematising different definitions & measures, the model is of great value to this field (McCrae & Costa Jr., 2008). Characteristics of personality are individual variables, the personality itself, the psychological complex structure organising experience/action, and the "personal model" called Five-Factor Theory (FFT) or known as Big Five Theory (McCrae & Costa Jr., 2008). Ideally, Big Five has been designed to organise and describe a collection of findings, in particular, to describe that longitudinal studies have shown remarkable stabilise of personality and consists of Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism (OCEAN) (John, Naumann, & Soto, 2008). Furthermore, Migliore (2011) also stated the Big Five is the strongest theoretically supported models in trait psychology.

By linking PMPTs and project success (PS), Bhatti, Battour, Ismail, & Sundram (2014) suggest that personality traits have a major impact on job performance, which is linked to project success. Research also has shown that personality characteristics can influence individuals' response to different convincing strategies (Oyibo & Vassileva, 2019). Previous researchers found that a high level of Openness to Experience (OE), Conscientiousness (CT) and Agreeableness (AG) has a positive connection to project success (PS) (Aronson, Reilly & Lynn, 2008; Hassan *et al*., 2017). In a meta-analysis conducted by Hurtz and Donovan (2000), it was found that CT has a good relationship with job success. Whereas, other researchers have found that the other two personality traits of "Big Five" Extraversion (ET) and Neuroticism (NT) are negatively linked to PS (Barrick, Mount & Judge, 2001; Deinert *et al*., 2015; Lin, Huang & Hsu, 2015; Seng *et al*., 2013). In accordance with prior researcher's findings, this study is attempted to explore OE, CT and AG's relationship with SPCPs Success. Thus, this paper aims to identify the relationship between PMPTs and project success are discussed in three attributes:

(i) Openness to Experience (OE) and SPCPs success - Project managers with this feature (OE) are often searching for solutions to the demands/expectations of stakeholders, creativity, imagination, ingenuity and diversity in life by "thinking outside the box" (Bernama, 2019; McCrae & John, 1992). Various scholars associate project managers

with OE traits as a major indicator of project success among the five main personality factors (Aronson *et al*., 2008; Hassan *et al*., 2017; Thal & Bedingfield, 2010). As such, we hypothesis that:

H1: There is a significant relationship between PMPTs (OE) and SPCPs success

(ii) Conscientiousness (CT) and SPCPs success - CT is an indicator of project managers ability to plan for the future, accountable, to continue, to pursue goal-oriented actions and to have greater influence over their environment (McCrae & John, 1992; Peterson, Smith, Martorana & Owens, 2003). With regards to project management, managers who exhibit CT have recognised that stakeholders are impressed with this performance attribute. CT is regarded as a primary predictor of project success, including creativity (Aronson *et al*., 2008; Thal & Bedingfield, 2010). Therefore, we hypothesis that:

H2: There is a significant relationship between PMPTs (CT) and SPCPs success

(iii) Agreeableness (AG) and SPCPs success - AG managers have good cooperation, partnerships, allowing them to work together in a harmonious atmosphere that involves comfort, prioritisation of competitiveness and acceptance (McCrae & John, 1992; Peterson *et al*., 2003). This trait predicts success with different parameters and indicates that cooperation has a strong association with project success, like paying attention to workers in the progress of the project (Barrick *et al*., 2001; Hassan *et al*., 2017). Hence, lead to the following hypothesis:

H3: There is a significant relationship between PMPTs (AG) and SPCPs success.

Moderated Role of Working Experience

In a simple definition, work experience can be the involvement an individual had or occupied in a particular type of job. In a project management context, it refers to time spent planning, leading, directing, and managing projects (Oxford, 2019; Project Management Institute, 2013). Recent research by (Matsuo & Kusumi, 2002) examined how the relationship between knowledge and performance can be moderated by experience. This is also supported by Shi & Chow (2015), who noted that previous studies had applied working experience as a moderator variable in the relationship between independent and dependent variables. In business and social science, moderating variable is at the heart of theory (Andersson, Cazurra & Nielsen, 2014). The choice of a moderator should be based on theoretical rationales with significant literature support. A moderator effect is nothing more than an interaction in which the impact of one variable depends on the level of other variables (Frazier, Tix & Barron, 2004).

For this study, the operational definition of working experience is the number of years the project manager has taken part in the management of SPCPs projects assigned to him or her, and most experienced project managers know there are multiple ways to manage a project. This can also be seen in the Malaysian public service circulars, where the project managers who have served the specialised areas for at least 5 years for professional/technical officers or at least 7 years for management field can be considered as Subject Matter Expert (SME) (Jabatan Perkhidmatan Awam, 2016). Meanwhile, several findings stated that personality traits were significantly correlated with work experience (Hassan *et al*., 2017). Therefore, it could moderate the relationship between project managers' personality traits, which is divided by

OCEAN, and project success for longer tenure or years of project experience. Little research has so far examined the moderating role of working experience between the project manager's personality and project success within the Ministry involved in SPCPs in the Malaysian context. Thus, to fill this gap in the literature, hypotheses for exploring the role of WE between project manager's personality and SPCPs success are as shown below:

H4a, H4b, H4c: Working experience moderates the relationship between PMPTs (OE, CT & AG) and SPCPs success.

INSTRUMENTS

Three of the most popular FFM instruments are the Big Five Inventory (BFI) (John *et al.*, 2008), the Mini-Markers (Saucier, 1994), and the NEO Personality Inventory-Revised (NEO PIR) (Costa & McCrae, 1992). This FFT is typically evaluated using the Big Five Inventory (BFI) and have high internal reliability at an average of 0.85 Cronbach Alpha (John *et al.*, 2008). In the context of Malaysia, according to Muhamad, Roodenburg and Moore (2018), with evidence supporting the cross-cultural applicability, the BFI is recommended when a shorter and briefer measure of personality is required. These personality traits are the most accepted measures of human personality (Gurven, Rueden, Massenkoff & Kaplan, 2013). This also supported by Manaf and Marzuki (2017) in their article 'The Roles of Personality in the Context of Knowledge Sharing'. The researcher used the BFI to assess of personality traits of public servants from a Malaysian perspective.

While several models were built to assess the success of a project in public sector organisations and this study, the criteria proposed by Khan, Turner and Maqsood (2013) has been selected, taking into account the factors described above. Researchers have examined the general requirements for the success of the project and produced a new five-dimensional model that includes project efficiency, organisational benefits, project effects, stakeholder satisfaction and potential future projects. Therefore, Project Success Achieved Instrument (PSAI) was selected in this study and provided a comprehensive overview of the success criteria for small projects. From the viewpoint of the Malaysian construction industry, specifically SPCPs, no previous studies have explicitly used this PSAI model based on the insights to date.

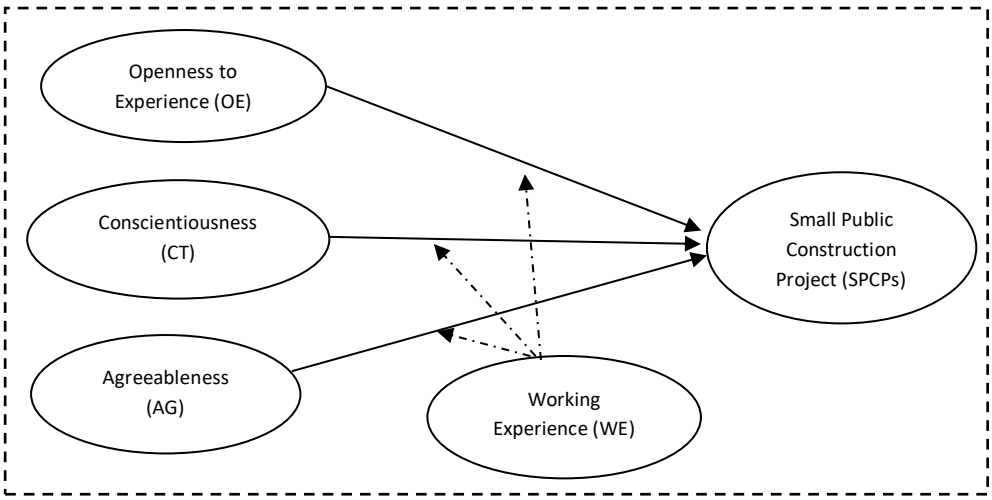

Figure 1: Research Framework

Hence, measurements of personality traits in this study were based on the Big Five Inventory (BFI) developed by John *et al.* (2008), with 44 measurement items. The BFI items are easy to understand as it uses short phrases based on the trait adjectives that serve as the prototypical markers and brevity of the BFI does not sacrifice its good psychometric properties (John *et al.*, 2008). It is therefore timely that the present study was conducted, taking into account the need for a valid personality instrument to measure the personality of Malaysians (Muhamad *et al.*, 2018) and the Project Success Achieved Instrument (PSAI) that is appropriate to the public sectors proposed by (Khan *et al.*, 2013). The proposed research framework is shown in Figure 1.

Table 1: Respondents profile

Subject		Frequency	Percentage (%)
Gender	Male	79	59.4
	Female	54	40.6
Age	18 - 24	0	0
	25 - 34	30	22.6
	35 - 44	87	65.4
	45 - 54	15	11.3
	55 and above	1	0.7
Ministry	Implementation Coordination Unit (ICU JPM)	106	79.7
	Ministry of Rural Development (KPLB)	27	20.3
State (Zone)	Northern (Perlis, Kedah, Penang)	26	19.6
	Centre (Perak, Selangor, Wilayah Persekutuan)	33	24.8
	Southern (Melaka, N.Sembilan, Johor)	20	15.0
	East (Kelantan, Terengganu, Pahang)	28	21.0
	Borneo (Sabah, Sarawak)	26	19.6
Grade	41-44	77	57.9
	48-52	47	35.3
	54-56	3	2.3
	JUSA and above	6	4.5
Education Level	Certificate/Diploma	0	0
	Degree	86	64.7
	Masters	45	33.8
	PhD	2	1.5
Project Management Field	Yes	57	42.9
	No	76	57.1
Working Experience	1 year and below	13	9.8
	1-4 years	34	25.6
	5-10 years	55	41.4
	11-15 years	24	18.0
	16-20 years	6	4.5
	20 years and above	1	0.8

METHODS

Sampling

When carrying out this study, quantitative methods were used based on the above description. A total of 137 ICU JPM and KPLB project managers were chosen as respondents to this study in 14 states in Malaysia. In the analysis and interpretation of results, the response rate of 97 per

cent (133) (see Table 1) and the judgmental sampling technique was used. In this type of sampling, subjects with the specific aim of being directly involved as project manager of the SPCPs were selected as samples. They were required to complete the survey, which consisted of three parts, part A related to demographics of the respondents and Working Experience (WE), part B personality traits - BFI and part C related to the SPCPs success - PSAI. In this study, Part B was measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), while Section C was measured on a five-point Likert scale (1 = unsuccessful to 5 = highly successful).

Data Analysis

Since latent constructs with multiple measuring components are used in the model, the multivariate Structural Equation Model (SEM) technique is, therefore, most suitable for this analysis. SEM data analysis is common in the social sciences because of its ability to evaluate theoretically support studies in management sciences (Chin, 1998; Haenlein & Kaplan, 2004). In this study, the PLS-SEM is the preferred analysis technique because it is deemed appropriate for complex models that include latent variables. Also, it examines relationships at the theoretical level (Hair *et al*., 2017). PLS-SEM positions less residual distribution criteria, measurement scales/sample sizes than CB - SEM and is useful when evaluating the relationship between the observed variables (Hair, Ringle, & Sarstedt, 2011; Rigdon, Sarstedt & Ringle, 2017).

RESULTS

Measurement Assessment Model

Measurement model assessment includes three key criteria, namely internal consistency Composite Reliability (CR), Average Variance Extracted (AVE) Discriminant Validity (DV) (Hair *et al*., 2014). Based on Gefen, Straub, & Boudreau (2000), CR is more appropriate to apply a different measure of internal consistency. The acceptable values for CR are ≥0.60, or between 0.70-0.90 can be regarded as satisfactory. In the meantime, items with loads below 0.5 are excluded to increase reliability (Hair *et al.*, 2017). The next step is to ensure the convergence validity of the construct in the analysis with AVE value ≥ 0.5 (Bryne, 2016; Hulland, 1999). Table 2 shows the constructs that meet the set criteria values as suggested by Hair *et al.* (2014) exceeds the minimum set.

In the meantime, Table 3 present the result of Discriminant Validity (DV) construct by Fornell – Larcker criteria in which AVE values are examined to be higher than the construct correlation (Fornell & Larcker, 1981).

Although the criteria of DV have been met, the issue of collinearity or better known as Variation Inflation Factor (VIF) value, can sometimes be confusing to discover in a hidden way (Kock & Lynn, 2012). Based on the VIF assessment, the internal values for the variables (AG - 2.1; CT - 2.1 and OE - 2.6) are less than 5 and 3.3. Thus, the issue of collinearity is not a problem (Diamantopoulos & Siquaw, 2006; Hair *et al*., 2017). Overall, the test of reliability and validity of the measurement model is satisfactory and validated. Thus, the analysis concludes that it does not interfere with the next step of evaluating the structural model.

Table 2: Measurement model assessment

Constructs	Items	*Factor Loading*	CR	AVE
Agreeableness (AG)	AG1	**0.82**	**0.823**	**0.543**
	AG2	**0.845**		
	AG3	**0.671**		
	AG4	**0.577**		
Conscientiousness (CT)	CT1	**0.816**	**0.808**	**0.514**
	CT2	**0.648**		
	CT3	**0.65**		
	CT4	**0.74**		
	NT2	**0.841**		
	NT3	**0.74**		
Openness to Experience (OE)	OE1	**0.755**	**0.835**	**0.505**
	OE2	**0.698**		
	OE3	**0.627**		
	OE4	**0.732**		
	OE5	**0.733**		
Small Public Construction Projects (SPCPs)	PSFP1	**0.712**	**0.962**	**0.508**
	PSFP2	**0.642**		
	PSFP3	**0.766**		
	PSFP4	**0.789**		
	PSOB1	**0.659**		
	PSOB2	**0.735**		
	PSOB3	**0.618**		
	PSOB4	**0.777**		
	PSOB5	**0.719**		
	PSPE1	**0.572**		
	PSPE2	**0.611**		
	PSPE3	**0.555**		
	PSPE4	**0.59**		
	PSPE5	**0.58**		
	PSPE6	**0.757**		
	PSPE7	**0.716**		
	PSPE8	**0.655**		
	PSPI1	**0.752**		
	PSPI2	**0.826**		
	PSPI3	**0.805**		
	PSPI4	**0.719**		
	PSSS1	**0.743**		
	PSSS2	**0.82**		
	PSSS3	**0.745**		
	PSSS4	**0.83**		

TABLE 3 - Fornell and Larcker's Criterion Constructs

	AG	CT	OE	SPCPs Success
AG	**0.737**			
CT	0.641	**0.717**		
OE	0.643	0.631	**0.71**	
SPCPs Success	0.53	0.6	0.494	**0.713**

Structural Model Assessment

The structural model was evaluated using PLS-SEM for testing hypotheses, with the confirmation of the measurement model. To illustrate the relationships, the bootstrapping technique and t-statistics were applied. The structural model relationships are evaluated by path coefficient among the constructs (Hair *et al.*, 2014). The main objective of this study was to explore the relationship between the personality of the project manager towards SPCPs success. Hence, a description of the hypothesis tests to show the degree of path coefficient between exogenous and endogenous structures is given in Table 4.

TABLE 4 – Direct Hypotheses Testing

No.	Hypotheses	β	*t value*	*p value*	Result
H1	Openness to Experience (OE) -> SPCPs Success	0.154	1.279	0.101	**Rejected**
H2	Conscientiousness (CT) -> SPCPs Success	0.41	4.299	0	**Supported**
H3	Agreeableness (AG) -> SPCPs Success	0.203	1.908	0.028	**Supported**

Note: (t ≥1.645, p<0.05)

Based on the analysis in Table 4, it can be observed that two personalities have a significant relationship to the success of the SPCPs, namely the Conscientiousness (CT), H2 - CT (β = 0.41, t = 4.299, $p<0.05$) and Agreeableness (AG), H3 - AG (β = 0.203, t = 1.908, $p<0.05$). Meanwhile, Openness to Experience (OE), H1 - OE (β = 0.154, t = 1.279, $p>0.05$) found to be insignificant in the success of the SPCPs. Thus, as summarised, the results of the hypothesis analysis indicate that H2, H3 (supported) and H1 (rejected).

Meanwhile, in the moderation analysis, Orthogonalzing (OGZ) was chosen because this approach is appropriate for cases of small sample size (<200 sample size) and few indicators per constructs (<4 indicators). It is also useful to interpret the strength of moderating effects (Henseler & Chin, 2010). Based on Ramayah *et al* (2018), the R2 change becomes important issues and, as shown in Table 5, indicates the additional variance of R2 for all constructs (small effect size result) (Cohen, 1988). However, the result found that the interaction effect between OE*WE, CT*WE and AG*WE with SPCPs success was insignificant. In other words, it can be said that WE do not moderate the relationship between project manager personality traits and SPCPs success. Hence, hypotheses H4a to H4c are rejected.

TABLE 5 - Moderator Analysis Result

No	Hypotheses	R^2 Excluded	R^2 Included	Effect Size (f^2) Result (Cohen, 1988)	Significant (t & p value)	Result
H4a	OE*WE -> SPCPs success	0.261	0.264	Small (0.004)	(t = 0.327, p = 0.372)	**Rejected**
H4b	CT*WE -> SPCPs success	0.369	0.373	Small (0.006)	(t = 0.47, p = 0.319)	**Rejected**
H4c	AG*WE -> SPCPs success	0.296	0.329	Small (0.049)	(t = 0.897, p = 0.185)	**Rejected**

Note: ($t \geq 1.645$, $p<0.05$)

DISCUSSION

The purpose of this study was to investigate the relationship of PMPTs on the success of SPCPs. Additionally, this research also aimed at understanding the WE impacts on this relationship (PMPTs and SPCPs) from the Malaysian public construction perspective. Interestingly, the results indicate that the personality of CT and AG has the strongest association among other traits, as a project manager with those characteristics is capable of being positive, ambitious and target-oriented. The results of this analysis are in line with Aronson *et al.* (2008); Peterson *et al*. (2003), who pointed out that project managers whom employers trust are the key drivers of project success and team performance (Lin *et al.*, 2015). This is further supported by Thal and Bedingfield (2010), who claimed that managers with CT could control and excel in their careers. This finding inconsistent with Hassan et al. (2017) that CT, which is usually the most significant predictor of individual and organisational performance, did not explicitly predict project success. Whereas AG encompasses warmth, a preference for cooperation over competition, the trust, acceptance of others and helpful in building collaborative in work environments towards the project success (Costa & McCrae, 1992; Halfhill *et al.*, 2005; Mccrae & Costa, 1987;). This result is consistent with Peterson *et al*. (2003), where project managers work together in a harmonious environment. This also supported by (Hassan *et al*., 2017; Moore, 2014), stipulating that the trait of AG has a strong correlation with paying attention to the managers as a contributor towards project success. In addition, Seng *et al* (2013) claimed that AG was well correlated with job success in Malaysia.

Meanwhile, the results also indicate that OE trait statistically was not significantly correlated with SPCPs success. This is perhaps due to several reasons. First, OE implies ingenuity, imagination, innovation as well as "thinking beyond the box," (Costa & McCrae, 1992). Thus, imagination, creativity, innovation and assertiveness seem more related to a big (complicated) type of project and are less likely to impact project managers in typical normal jobs setting (Tett, Jackson & Rothstein, 1991). It seems reasonable because project managers who oversee small scale projects (SPCPs) prefer not to show superiority and professional ambitions but are more concerned with stakeholder's satisfaction due to the fact that most of these types of projects are implemented in rural areas.

Besides, this study indicated that WE did not moderate any relationship between PMPTs towards SPCPs success. It contradicts the previous literature that found that WE moderates the relationship between variables and plays an important part in the success of project managers (Ceric, 2014; Shi & Chow, 2015). Additionally, Paton and Hodgson (2016) also claimed that

project managers' experience influences their knowledge, training, performance, and overall project success. Our study findings are consistent with (Karim, Ahmad & Zainol, 2017), who noted that WE did not give any differences in project managers (management) level. From a different viewpoint, these results indicate that WE does not affect the success of SPCPs, and it is clear that any relevant project manager (with or without WE) could coordinate/implement small-scale projects. Hence, this finding may also guide the Malaysian Public Service Department in interpreting SME circular. These SPCPs do not need to retain experienced project managers in the relevant ministries.

Theoretical/Practical Implications and Limitations

This study contributed to the construction management literature by providing insights into the personality traits that have impacted the success of SPCPs by incorporating WE as a moderator. Nonetheless, the findings indicate a range of theoretical/practical implications for academicians and practitioners of the variety of magnitude of the present study. In the past, limited studies of project success in the relationship between BFI and PSAI have been conducted, particularly in the relation of the public sector. The current study also offers an insight into the use of BFI and PSAI as tools in other industries for researchers interested in this field. Furthermore, due to a lack of attention, in particular on non-technical (personality) skills, this research was also designed to provide useful guidance to scholars, mainly in the areas of SPCPs. In the meantime, at the managerial level, this study also enhances understanding of the diverse project manager's personality background and provides appropriate coaching to serve stakeholders' satisfaction better. Plus, this research would allow the Human Resource (HR) to identify common personality traits for the placement of officers in selected organisations directly involved in the project.

Few limitations of this study open up future research opportunities into personality traits, work experience and project success. Firstly, the sample size is limited (less than 200 respondents) and focuses only on the public sector area. Secondly, data were collected within a short time frame and delivered only to the selected Ministry. Thirdly, only a few PMPTs were incorporated in this study's model. Lastly, since this study is limited to the moderating roles of WE, project manager personality traits and project success, it is interesting to include a variety of mediator or moderator links to further enhance insights into different aspects.

CONCLUSION AND FUTURE RESEARCH

The results from this study indicate that the project manager's personality and SPCPs success in Malaysia has a significant influence. Meanwhile, working experience does not moderate the relationship between PMPTs and the success of SPCPs. It is also important to support previous research that the essence of AG and CT has a positive impact on the success of SPCPs and project managers who are disciplined, systematic, positive and strategic teamwork collaborations have contributed to the success of projects. Regarding developing country's perspectives at the policy level, the Human Resources (HR) should concentrate specifically on staff selection, taking into account the personality traits dimension in further improving the effectiveness of the public sector. This study also supports preceding studies, providing theoretical and practical insights that have significantly affected project success with a personality trait of the project manager. As a result, this study's findings provide fresh momentum and greatly improve new knowledge for public construction for the sake of stakeholder's satisfaction, especially in the context of small-scale project management.

In addition, the study encourages future research in the following three directions to overcome these limitations, including (i) increasing the sample size of respondents and concentrating unexplored ministry selection in the public sector or focusing on the private sector; (ii) improving different types of projects as well as timeframes; (iii) incorporating other PMPTs to gain a deeper perspective and reach the overall SPCPs and (iv) researching different moderators or mediators in the field.

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