

# Psychological Factors Contributing Towards Individual Work Performance Among Rohingya Refugees and Indonesian Migrant Workers in Malaysia

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## Abstract

As of 2019, Malaysia has about 1.87 million low-skilled migrant workers, with the majority from Indonesia. Likewise, there are about 180,000 refugees in Malaysia, especially the Rohingya from Myanmar. This study empirically determines whether Malaysia could replace a portion of the lower-skilled migrant workers that Malaysia's economy depends on with a group of people indispensable by Malaysia by investigating their psychological factors contributing to individual work performance. Hence, this research distributed questionnaires to equal numbers of employed Rohingya refugees (n = 180) and Indonesian lower-skilled migrant workers (n = 180). The data were analysed using structural equation modelling– partial least square (SEM-PLS) method, SMART PLS 2.0 software. The results showed that that Rohingya workers' resilience attributes strongly influenced individual work performance, whereas self-efficacy attributes were the main contributor to Indonesian migrant's work performance. There were significant differences between the two types of migrants in terms of path coefficient. Hence, this implies that the impacts of psychological factors differed between various migrants backgrounds. The study fills a significant gap in comparing psychological behaviour between refugees and economic migrants like the Indonesians. In addition, this study clarifies the factors that are more effective in stimulating work performance according to the type of migrants.

**Keywords:** Refugees, Rohingya, economic migrant workers, psychological capital, individual work performance

## 1.0 Introduction

Migrant workers are the backbone of economic growth and development in several countries. Due to economic reasons and limited livelihood opportunities in their home countries, many people

have chosen to migrate from lower-income countries to higher-income countries within (and beyond) their sub-region. The latest statistics showed that out of 21.8 million total sub-regional migrants, 6.8 million migrated within Southeast Asian countries (IOM, 2020). As one of the more advanced economies in this region, Malaysia has become a favourable destination for migrants.

Over the last 30 years, Malaysia has housed a huge number of low-skilled migrant workers. The official figure of migrant workers as of 2019 is 1.87 million, but the number of undocumented low-skilled workers maybe double or triple the official number (ILMIA, 2020). This situation signifies that Malaysia is facing a labour shortage filled by migrant workers mainly hailing from Indonesia (comprising 32.1 per cent or 600,234 of the total number of foreign workers in 2019), leading to an over-dependence on lower-skilled migrant workers. As lower-skilled migrant workers become the cornerstone of Malaysia's economy, many of them have become demanding, with some leaving their legal employers to work for a higher bidder. Subsequently, this phenomenon has caused them to overstay their work visa, eventually turning them into undocumented or illegal migrants.

At the same time, Malaysia has also experienced another form of international migration – refugees from mainly Islamic countries taking advantage of Malaysia as an Islamic-friendly country. Refugees are the most vulnerable population in the world forced to seek protection in friendly neighbouring countries. As of the end of May 2021, about 179,570 refugees and asylum-seekers are registered with UNHCR in Malaysia, with nearly 102,950 or 57% Rohingyas. The number of refugees in Malaysia, predominantly the Rohingyas ethnic, has been increasing over the last ten years. All countries (including Malaysia) in Southeast Asia, except for the Philippines and Cambodia, are not signatory parties to the United Nations Refugee Convention 1951 or 1967 protocols and hence do not accord refugees with legal rights (employment, education and basic health care) to build 'homes' in host countries. However, Rohingya refugees, who are likely to stay permanently in the country, are more prepared and ready to occupy lower-earning jobs and even dirty, dangerous, and difficult working circumstances when compared to local workers (Akgündüz et al., 2015). Despite not having legal rights to work, many of these refugees and asylum seekers in Malaysia are engaged in informal employment (Wake & Cheung, 2016).

One obvious solution is to replace demanding lower-skilled migrant workers with refugee workers who will be in Malaysia for a long time. However, there is considerable debate among all stakeholders in terms of psychological readiness, work rate, potential opportunities and burdens about the presence and local integration of refugees into the host economy (Baloch et al., 2017). In the general population, Psychological Capital is elemental to success in the employment domain, relating positively to work performance. Additional evidence documented that PsyCap played a vital role in improving performance and contributed to high inner strength; besides, when facing critical conditions, participants were able to rationally act (Harms & Luthans, 2012). In another study, Luthans et al. (2012) provide evidence on the significant relationship on PsyCap dimensions (self-efficacy, hope, optimism, resilience), which increased instructors' motivation to conduct scientific research continuously. Additionally, Herd (2010) found that positive PsyCap also has to cultivate high school achiever's academic performance; even though it is not in the employment context, the present study believed that a similar concept could directly influence the individual work performance. However, there are limited studies regarding Psychological Capital and its relationship towards individual work performance, especially in the refugee and migrant population context. Therefore, this study incorporates the elements of self-efficacy, hope, resilience, and optimism in the study model to generate a deeper understanding of individual work performance.

## **2.0 Literature Review**

### **2.1 Refugees Versus Economic Migrants**

Due to different motives and characteristics to migrate, it often happens that refugees fall under economic disadvantageous circumstances compared to other economic migrants, like Indonesian workers. As described by Richmond (1988), forcibly displaced persons are not selected on a class basis, being less prepared and often suffering from traumatic experiences (Bakker et al., 2014; Phillimore, 2011). In addition, studies have been postulated to discover this refugee gap, which implies that on average, refugees have a less educational background, poor English language proficiency and less working experience. They also struggle to improve physical and mental health and living in more vulnerable neighbourhoods than other economic migrants (Connor, 2010). Nevertheless, Connor added that

employability rates are about the same for both migrant groups while also pointing out that in the long run, the gap could be reduced as they increase their education and assimilate with the host culture.

Miriam Potocky-Tripodi (2003) in her study stated that a majority of refugees often occupy hazardous working environments and poorer paying jobs that locals choose not to engage in. Additional evidence was provided by Cortes (2004) upon analysing the immigrant labour market data in the United States economy for 1980 and 1990. The author reported that employed refugees earned 6 per cent less and worked 14 per cent fewer hours than other economic migrants. In the following decade, significant growth was achieved by both migrant groups; however, employed refugees had made substantial gains. As a result, employed refugees received 20 per cent additional earnings, worked 4 per cent extra hours, and subsequently enriched their English abilities by 11 per cent relative to other economic migrants. The study also highlighted these increments mainly resulted through endless effort made by refugees on the improvement of their human capital and other social and psychological capital.

In a recent study, Bakker, Dagevos, & Engbersen (2017) analysed the labour market participation of refugees versus other migrants in the Netherlands. The study was conducted to examine the existence and development of the refugee gap. It was found that a refugee gap exists due to different migration motives, language proficiency, and legal issues which delay their labour market participation from the moment of arrival. Nevertheless, this gap diminishes over time. In fact, the refugee gap gets smaller as refugees do catch up with other migrants to a certain extent; hence, appear to be able to turn their disadvantages into advantages.

## 2.2 Positive Psychological Capital

Psychological Capital (PsyCap) is concerned with individual views on positive inputs through manipulating any negative circumstances to a positive outlook on life and job tasks. Individuals with positive PsyCap would deliver better outcomes in order to achieve organisational goals and shape their performance (Avey et al., 2009; Mathe et al., 2017). As such, PsyCap consists of four dimensions: self-efficacy, optimism, hope, and resilience.

First, self-efficacy demonstrates the positive ability of the individual to succeed in an undesirable business atmosphere and have confidence in completing any task or goal (Luthans et al., 2007b). In

another study, Stajkovic & Luthans (1998) defined self-efficacy as motivation underlying one's capabilities to perform. Second, optimism is a positive attribute to stabilise a situation when there are turbulence conditions (Luthans et al., 2007b). Peterson (2000) in his study pointed out that optimism is an activity related to accomplishing set targets, which is also associated with individuals that expect fine things to happen. Third, hope is defined as a perceived ability to motivate oneself towards achieving organisational goals (Luthans et al., 2008). The determination to achieve long-term goals and have a clear pathway is also included in dimensions of hope (Avey et al., 2009; Snyder, 2000). Fourth, resilience refers to the ability of an individual to bounce back from adversity and negative events in life (Mills et al., 2013). Employee resilience has become a crucial element used to face any shocked and unwanted event in an organisation. Highly resilient employees will endure and manipulate negative events to become positive opportunities (Kappagoda et al., 2014). Moreover, it is critical to determine whether self-efficacy, hope, resilience, and optimism significantly link to Individual Work Performance dimensions; task performance, contextual work behaviour, and counterproductive work behaviour. In other words, it is imperative to assess whether Rohingya refugees can replace lower-skilled migrant workers, mainly from psychological and individual work performance perspectives.

### 2.3 Individual Work Performance

Individual Work Performance (IWP) is a relevant and often used outcome measure of studies in the employment setting. IWP is defined as behaviours or actions that are relevant to the goals of the organisation (Campbell et al., 1990). Several authors have suggested that the underlying structure of IWP is a necessary instrument when measuring employee performance. Campbell (1990) in an earlier study identified task performance as an important construct of IWP, which mainly comprises the proficiency of an individual to perform his or her jobs efficiently and excellently. In the same vein, Campbell (1990) and Koopmans et al. (2014) argued that the dimension of task performance is significantly associated with positive and proactive attitudes related to job-specific, knowledge, skills and work quality.

A bulk of existing literature has addressed IWP as a multidimensional concept (Austin & Villanova, 1992; Campbell, 1990; Koopmans et al., 2014). Several studies have started to consider other dimensions for the measurement of IWP (Borman & Motowidlo, 1993;

Dalal, 2005; Rotundo, 2002). For instance, Viswesvaran & Ones (2000) and Rotundo (2002) pointed out in their studies that contextual performance and counterproductive work behaviour (CWB) are important dimensions of IWP. Borman & Motowidlo (1993) defined contextual performance as non-technical behaviour that also contributes to organisational development and strengthens the social and psychological environment without eliminating the core function of tasks. For example, demonstrating effort, facilitating peer and team performance, cooperating, and communicating with superiors are considered constructs to translating contextual performance (Campbell, 1990; Rotundo, 2002).

The final dimension underlying IWP is CWB, which was defined by Rotundo (2002) as a behaviour that harms the performance of employees and the organisation. Furthermore, Koopmans et al. (2011) in their study pointed out some examples of CWB behaviour, such as theft, gossiping, violence and absenteeism. Moreover, this unpleasant behaviour has been reported to reduce worker productivity, which directly costs businesses multibillion dollars annually (Bennett & Robinson, 2000). Technically, CWB is categorized into two sub-factors: first, deviant behaviour which harms that is directed at the organization; second, deviance directed at other employees/individuals. Moreover, Spector, Bauer, & Fox, (2010) argued that CWB can be examined from a variety of perspectives. Among such studies, Ng & Feldman (2009) discussed the relationship of CWB and education level, and seem to conclude that education level of individuals is negatively linked to CWB and also contributes to deviant behaviour, which increases employee aggression and on-the-job substance abuse. In another study, Krischer, Penney, & Hunter (2010) did a CWB analysis among government and private sector employees. The study has pointed out that deviant behaviour appears more pronounced across the private sector associated with high pressures conveyed by the top organisation to achieve production and sales targets assigned to them.

#### 2.4 The Effect of Psychological Capital and Individual Work Performance

Having a positive Psychological Capital provides a platform from which employees can be inspired to realise not only their personal goals but also those of the organisational performances where they work. In this regard, Zeglal & Janbeik (2019) argued that Individual Work Performance shows a partial mediating role in the relationship

between meaningful work and organisational outcomes. Furthermore, Sofija Pajic et al. (2018), when investigating the associations between psychological resources, career obstacles, and self-efficacy in the job searches of Syrian refugees in Greece and the Netherlands, found that refugees with higher Psychological Capital participated more confidently in job search activity. However, it was weakened if they came across some administrative or legal restrictions. This study is also consistent with findings from Luthans et al., (2005) on the positive correlation between Psychological Capital and work performance. Sahoo & Sia, (2015) also indicated that Psychological Capital can promote meaningful work performance and help mitigate unfavourable employee behaviour and attitudes. Moreover, improving Psychological Capital led to the enhancement of organisational engagement, better management of workers, lower absences of employees and greater work satisfaction (Abbas & Raja, 2015; Huynh & Hua, 2020; Idris & Manganaro, 2017; Luthans et al., 2007a).

In another study, Charbonnier-Voirin, Roussel, Charbonnier-Voirin, & Roussel (2012), also argued with Campbell that adaptive behaviour, such as the ability to set job priorities, show resilience, have the capacity to self-learn, and adapt quickly in emergency circumstances indicates a high level of individual performance. However, the role of employee resilience as a construct underlying individual work performance has not been extensively explored. According to Bardoel, Pettit, De Cieri, & Mcmillan (2014), they concluded that resilience could be a valuable remedy in mitigating unstable workplace conditions or other non-work turbulence of employee lives. Thus, employees would be able to maintain positive work attitudes and avoid any deviant behaviour.

As mentioned in the earlier section, business turbulence and unstable workplace conditions have become the norm for many organisations, and employee resilience to adapt to business changes has confirmed that it is a critical individual value to cope with constant changes (Shin et al., 2012). As a result, many human resource managers have taken efforts to build positive psychological behaviour and develop the resilience of their workers (Bardoel et al., 2014; Luthans et al., 2006). As described in the study by Bjorkoli (2010), migrant workers had stronger and more positive individual attributes (e.g. motivated, hardworking, willing to work long hours, flexible and reliable) than native workers, which in turn contributed to boosting business productivity. Furthermore, most employers involved in the

study claimed that they tended to recruit migrants because of an “attitude gap,” rather than a “cost” or “skill gap.” Recently, Jordaan (2018) reported that migrant workers in Malaysia displayed higher levels of motivation and positive outlooks on work compared with local workers.

Given the above, sufficient past literature has addressed three dimensions underlying IWP namely task performance, contextual performance and counterproductive work behaviour. However, in refugee and economic migrant studies, this concern and distinction have received relatively little attention. Additionally, there has been no research on the role that overall Psychological Capital could play in predicting the work performance of refugees and economic migrant workers. Besides, there are no studies that examine these positive Psychological Capital and Individual Work Performance in non-signatory host country samples and comparing the result with other economic migrants. Figure 1 below illustrates the research framework used for determining the second component of this study, whereas Table 1 outlines the main hypotheses and hypotheses between-group differences based on the evidence discussed.

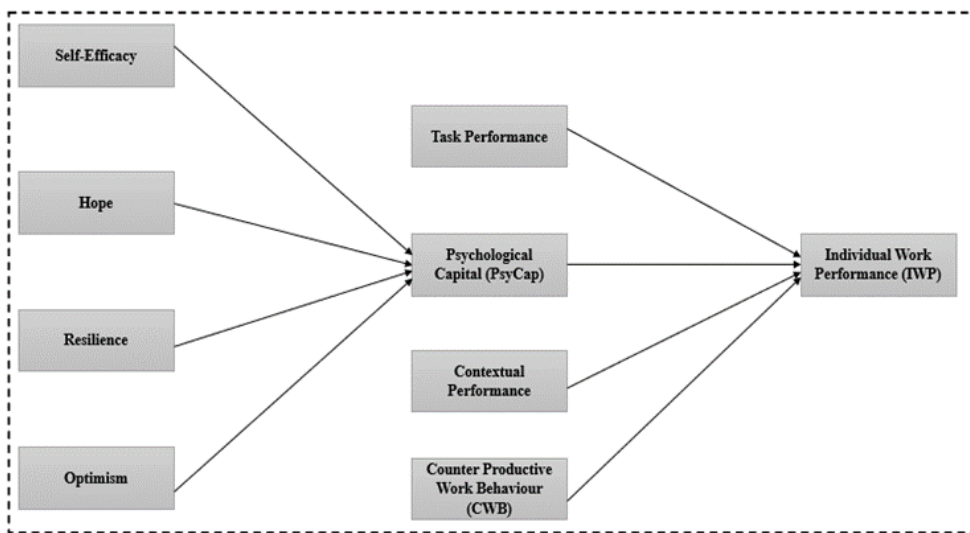


Figure 1 : Conceptual Research Framework for Measuring Individual Work Performance



Table 1 : The main hypothesis and hypothesis between-group differences of Psychological Capital and Individual Work Performance between employed Rohingya refugees (ROH) and Indonesian migrants' workers (INA)

<b>Hypothesis</b>	
H <sub>1</sub>	There is a positive relationship between Self-Efficacy behaviour and psychological capital
H <sub>2</sub>	There is a positive relationship between Hope behaviour and psychological capital
H <sub>3</sub>	There is a positive relationship between Resilience behaviour and psychological capital
H <sub>4</sub>	There is a positive relationship between Optimism behaviour and psychological capital
H <sub>5</sub>	There is a positive relationship between Psychological Capital and Individual Work Performance
H <sub>6</sub>	There is a positive relationship between Task Performance and Individual Work Performance
H <sub>7</sub>	There is a positive relationship between Contextual Performance and Individual Work Performance
H <sub>8</sub>	There is a positive relationship between Counter-Productive Work Behaviour and Individual Work Performance
H <sub>9</sub>	The impact of the Self-Efficacy on Psychological Capital factor toward Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>10</sub>	The impact of the Hope on Psychological Capital factor toward Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>11</sub>	The impact of the Resilience on Psychological Capital factor toward Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>12</sub>	The: impact of the Optimism on Psychological Capital factor toward Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>13</sub>	The impact of the Task Performance on Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>14</sub>	The impact of the Contextual Performance on Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)
H <sub>15</sub>	The impact of the Counter-Productive Work Behaviour on Individual Work Performance will be higher for employed Rohingya refugees (ROH) than for an Indonesian Lower-Skilled Migrant worker (INA)

### **3.0 Research Methodology**

#### **3.1 Survey and Data Collection**

This study aimed to determine the Psychological Factors contributing towards Individual Work Performance among Rohingya Refugees and Indonesian Migrant Workers in Malaysia. The underlying factors were self-efficacy, optimism, hope, resilience, task performance, contextual performance, and counterproductive work behaviour. Accordingly, this study entailed a quantitative research approach using a self-reported questionnaire. In the absence of a sampling frame, this research applied quota sampling to ensure that cluster migrant groups were adequately assigned.

Besides quota sampling, cluster sampling is also beneficial when study respondents are associated with vulnerable populations, such as refugee communities and other migrant workers. As such, both groups of migrants are expected to represent 50 per cent of each lower-skilled cluster; (1) Rohingya refugees (ROH) and (2) Indonesian lower-skilled migrant workers (INA). This study employed non-probability sampling and sources of respondents mostly relied on access from the researcher's networking, information gathered from UNHCR, refugee learning centres, and other NGOs associated with Rohingya refugees' needs. Besides, the snowball technique was also employed to obtain a minimum number of respondents by talking to subjects and a person who worked with them. Throughout the process, existing respondents recommended other potential participants who fitted the inclusion criteria.

#### **3.2 Sample Size**

Recent developments suggest that researchers should determine sample size through power analysis (Hair et al., 2017; Kline, 2015; Ramayah et al., 2016; Ringle et al., 2013). Power analysis determines the minimum sample size by considering the part of a model with the largest number of predictors (Hair et al., 2014; Roldán & Sánchez-Franco, 2012). This software was designed as a power analysis programme for statistical tests commonly used in social and behavioural research (Erdfelder et al., 2009). Upon inputting the required parameters into the G\*Power software, the estimated minimum sample size was required for the research model is 103.

Another method in determining the appropriate sample size used in this study was the 10-times rule (Barclay, Thompson, dan

Higgins, 1995), which has been widely accepted in the PLS-SEM literature. The 10-times rule recommends that the minimum sample size should be equal to the larger of the following: (1) 10 times the largest number of formative indicators used to measure a single construct, or (2) 10 times the largest number of structural paths directed at a particular construct in the structural model (Hair et al., 2017). Under these circumstances, the minimum required sample size estimated via this method was 7 times 10, which amounted to a minimum number of 70 observations required to estimate the PLS path model.

In conclusion, from the two sample size calculation methods, the range of observations provided must be larger than 70. This means that the minimum selected sample in this study (150 and above) is considered meaningful (Memon et al., 2020). Hence, a set of 360 structured questionnaires were distributed, focusing on selected refugee learning centres, the immigration department office, the UNHCR office, and construction sites areas around the Klang Valley, Malaysia.

### 3.3 Construct Measures

The construct measures applied in the current study were adopted from past studies which have been assigned with 47 items assessed with a 6-point Likert scale (1 signifies “strongly disagree” and 6 denotes “strongly agree”). For example, the constructs of psychological capital were measured using the 24 items of self-efficacy, optimism, hope and resilience, which were adapted from the works of Luthans et al., (2007b), Scheier & Carver (1985), Snyder et al., (1996), Wagnild & Young (1993). Meanwhile, 18 items measuring individual work performance were adapted from Campbell & Wiernik (2015), Connor & Davidson (2003), and Koopmans et al., (2014) with some modifications to make them applicable in the context of refugees and migrants work environment.

### 3.4 Data Analysis

The present study applied structural equation modelling-partial least square (PLS-SEM) version 2.0 M3 Beta (Ringle et al., 2005) to analyse the research model designed. In line with Kwong-Kay Wong (2013), SEM is the most suitable and newest statistical software that can assess theoretically supported linear relationships and is appropriate for exploratory research. As such, it facilitates the

determination of the factors influencing Psychological Capital and Individual Work Performance. Moreover, PLS-SEM can also simultaneously execute within and between-groups comparisons. For this purpose, PLS-based MGA (Multi-Group Analysis) was used to investigate each dimension's differences among both respondents' groups.

## **4.0 Findings**

### **4.1 Respondent's Characteristics**

As shown in Table 2, most respondents from the Rohingya group were male (99.4 per cent). This is consistent with the traditional setting in which men work and women are typically viewed as caregivers. In comparison, for the Indonesian group, there was more female than male respondents, comprising 54.4 per cent of the total respondents. In terms of age, most of the respondents were below 30 years old (Rohingya 82.2 per cent; Indonesian 85.6 per cent), and more than 50 per cent of them were single. Looking at the state of residence, an overwhelming majority (79.4 per cent) of Rohingya respondents stayed and worked in Selangor, whereas the proportion was around 55.6 per cent for Indonesian respondents. Given this urban setting, refugees are often more vulnerable to exploitation and less likely to integrate with the local community (Jacobsen & Nichols, 2011).

The demographic analysis based on formal educational attainment can be divided into three levels based on the responses: for Rohingya respondents, 16.7 per cent obtained high school and above educational qualifications, 25.1 per cent had less than high school and a vast majority of 58.3 per cent did not obtain any formal education before fleeing to Malaysia. For Indonesian responses, 56.6 per cent obtained high school and above educational qualifications, 37.8 per cent had less than high school education and the remainder (5.6 per cent) had no formal education. Indonesian respondents are slightly better in terms of educational attainment with Rohingyas recording 2.7 per cent more respondents who have higher educational qualifications.

Next, the analysis of the respondents' employment components yielded valuable results. An overwhelming majority (95 per cent Rohingya; 62 per cent Indonesian- omitting students on the statistics provided) of respondents already participated in the labour force in their home country before fleeing to Malaysia. However, most of them only had worked in the agricultural sector as small-time farmers and were

unfamiliar with a standard working system such as working hours, working days, minimum wage and payslips. In light of their participation in the local labour market, respondents were demarcated into five sectors as follows:

1. Construction
2. Plantation
3. Services
4. Manufacturing
5. Retail

The majority of Rohingya respondents (51.7 per cent) were in the retail sector, followed by the services sector (32.8 per cent), manufacturing (11.7 per cent), construction (3.3 per cent), and plantation (1 per cent), whereas for Indonesian respondents, more than half worked in the services sector (57.2 per cent), followed by the construction sector (21.1 per cent), manufacturing (9.4 per cent), plantation (8.9 per cent), and retail (3.3 per cent). On a monthly income basis, the majority of respondents (Rohingya 59.4 per cent; Indonesian 60 per cent) have monthly income levels between RM1001-RM1500, while 16.1 per cent Rohingya and 23.9 per cent Indonesian respondents have a monthly income level between RM1501-RM2000, followed by monthly income earners below RM1000 (Rohingya 13.9 per cent; Indonesian 15.0 per cent). The sharp contrast between group samples can be found in the monthly income level earned above RM2000, in which Rohingya recorded 9.5 per cent points higher than Indonesian respondents. Despite access to the labour market is highly restricted for refugees, they still can make a good income.

Table 2 : Respondent Characteristics

<b>Title</b>	<b>Title</b>	<b>Rohingya (ROH)</b>		<b>Indonesian (INA)</b>	
<b>Characteristic</b>	<b>Measurement</b>	<b>Number (n)</b>	<b>percentage (Per cent)</b>	<b>Number (n)</b>	<b>percentage (Per cent)</b>
Age (Years old)	18 and below	20	11.1	2	1.1
	19 to 25	93	51.7	88	48.9
	26 to 30	35	19.4	64	35.6
	31 to 34	18	10.0	12	6.7
	35 and above	14	7.8	14	7.8
Gender	Male	179	99.4	82	45.6
	Female	1	0.6	98	54.4
Marital Status	Single	118	65.6	92	51.1
	Married	62	34.4	86	47.8
	Other	-	-	2	1.1
State of Residence	Selangor	143	79.4	100	55.6
	Kuala Lumpur	34	20.6	80	44.4
Highest Educational Attainment	None	44	24.4	2	1.1
	Religious school	61	33.9	8	4.4
	Less than elementary school	21	11.7	10	5.6
	Elementary school	10	5.6	20	11.1
	Less than high school	14	7.8	38	21.1
	High school	19	10.6	96	53.3
	Some college	3	1.7	2	1.1
	College degree	8	4.4	4	2.2
Employment Sector	Construction	6	3.3	38	21.1
	Plantation	1	0.6	16	8.9
	Services	59	32.8	103	57.2
	Manufacturing	21	11.7	17	9.4
	Retail	93	51.7	6	3.3
Monthly Income	RM1000 and below	25	13.9	27	15.0
	RM1001-1500	107	59.4	108	60.0
	RM1501-2000	29	16.1	43	23.9
	RM2000 and above	19	10.6	2	1.1
	Total		180	100	180

#### 4.2 Test of Measurement Model

This study used three main assessments as suggested by Hair et al. (2017) for the assessment of the reflective measurement model.

These three assessments are internal consistency reliability, convergent validity and discriminant validity.

#### 4.2.1 Internal Consistency

Overall, the values for Cronbach's Alpha for both data sets were above the recommended level of 0.70 (Hair et al., 2017). Although the Cronbach's Alpha score for the ROH data set ranged from 0.65 to 0.79, it is considered acceptable in exploratory research. More importantly, the values of composite reliability (CR) for both data sets surpassed the threshold value of 0.7 or higher as suggested by Gefen et al. (2011). Accordingly, these results (Table 6) indicate adequate internal consistency of the data or implies that indicators are consistent with what they intend to measure (Schwarz et al., 2014).

#### 4.2.2 Convergent Validity

To evaluate the convergent validity of reflective constructs, researchers recommend the outer loadings of the indicators and the average variance extracted (AVE) should be higher than 0.707 (Hair et al., 2014) and 0.5 (Fornell & Larcker, 1981), respectively. Based on these recommendations, some items were deleted (F03, F15, F20 and F23) since their loading values were higher than 0.707. Although the outer loading and AVE of the item IWP5 in the ROH data set were below the recommended values, the item was maintained in the final model since the outer loading and AVE scores were greater in the full sample and INA data set. Additionally, the item is considered crucial in explaining the indicator and the deletion of the item might change the relationship of the indicators and latent variable. The final results showed that the reliabilities, items, and composite of both data sets were well above the recommended level of 0.70. Furthermore, the AVEs was also well above the 0.5 recommended value, indicating that the scales used in predicting Psychological Capital and Individual Work Performance possessed convergent validity (Table 3).

#### 4.2.3 Discriminant Validity

The discriminant validity was determined using the method involving the pairwise extraction of the association between factors. Fornell & Larcker, (1981) introduced this method of comparison of correlation with an extracted variation. The results of discriminant validity for both data sets are shown in Appendices 1 and 2,

respectively. Discriminant validity occurs when the identical rows' diagonal values and columns are substantially higher than those of the off-diagonal components. Accordingly, the measurement items used in this study achieved an adequate level of discriminant validity (Henseler et al., 2009). The results revealed that all constructs used in predicting Psychological Capital and Individual Work Performance for both data sets possess discriminant validity.



Table 3 : Test of Measurement Model

Constructs	Items	Full Sample (n=360)				ROH (n=180)				INA (n=180)					
		Loading	Cronbach's Alpha	AVE	CR	Loading	Cronbach's Alpha	AVE	CR	Loading	Cronbach's Alpha	AVE	CR		
Self-Efficacy	F02	0.783	0.807	0.633	0.874	0.769	0.666	0.499	0.799	0.785	0.857	0.700	0.903		
	F04	0.792				0.666				0.853					
	F05	0.823				0.723				0.871					
	F06	0.785				0.662				0.835					
Hope	F08	0.729	0.786	0.538	0.853	0.602	0.698	0.450	0.802	0.791	0.828	0.589	0.877		
	F09	0.737				0.695				0.787					
	F10	0.747				0.614				0.798					
	F11	0.759				0.794				0.757					
Resilience	F12	0.692	0.764	0.585	0.850	0.632	0.645	0.479	0.785	0.701	0.808	0.634	0.874		
	F14	0.773				0.689				0.791				0.810	
	F16	0.762				0.699				0.810				0.786	
	F17	0.765				0.765				0.786				0.797	
Optimism	F18	0.760	0.767	0.680	0.864	0.606	0.689	0.614	0.825	0.797	0.818	0.730	0.890		
	F21	0.824				0.822				0.843				0.867	
	F22	0.797				0.677				0.867				0.854	
Task Performance	F24	0.852	0.841	0.677	0.893	0.840	0.753	0.575	0.844	0.854	0.878	0.916	0.732		
	G02	0.798				0.747				0.822				0.822	0.878
	G03	0.803				0.691				0.861				0.852	
	G04	0.843				0.830				0.852				0.885	
Contextual Performance	G05	0.846	0.851	0.626	0.893	0.760	0.796	0.551	0.860	0.885	0.869	0.657	0.905		
	G07	0.777				0.735				0.790				0.780	
	G10	0.765				0.722				0.780				0.834	
	G11	0.800				0.733				0.834					

Constructs	Full Sample (n=360)					ROH (n=180)				INA (n=180)			
	Items	Loading	Cronbach's Alpha	AVE	CR	Loading	Cronbach's Alpha	AVE	CR	Loading	Cronbach's Alpha	AVE	CR
Counter-Productive Behaviour	G12	0.828				0.757				0.861			
	G13	0.786				0.764				0.784			
	G15	0.890	0.889	0.751	0.924	0.822	0.774	0.596	0.854	0.898	0.910	0.786	0.936
	G16	0.833				0.681				0.869			
	G17	0.880				0.822				0.896			
	G18	0.863				0.754				0.884			
Individual Work Performance	IWP1	0.777	0.787	0.546	0.856	0.666	0.653	0.434	0.782	0.816	0.842	0.616	0.888
	IWP2	0.765				0.708				0.814			
	IWP3	0.817				0.757				0.854			
	IWP4	0.750				0.745				0.771			
	IWP5	0.558				0.313				0.655			
Psychological Capital	PsyCap1	0.800	0.773	0.596	0.855	0.742	0.656	0.493	0.795	0.836	0.821	0.653	0.882
	PsyCap2	0.726				0.733				0.734			
	PsyCap3	0.760				0.670				0.785			
	PsyCap4	0.800				0.659				0.870			

### 4.3 Test of Structural Model

The model was checked for collinearity issues during the initial stage of the assessment. It was found that all of the Inner Variance Inflation Factor (VIF) values were less than 5, which indicated the absence of collinearity issue since all of the values met the minimum threshold as suggested by Hair et al. (2011). Next, the structural model was tested using the R square, which is considered the explanatory power of the research. The value was at a satisfactory level as shown in Appendix 3. For the ROH data set (Appendix 4), all paths were significant at 0.01 levels, except for Self-Efficacy -> Psychological Capital path, which was significant at 0.05 level. Furthermore, the ROH model explained 54.6 and 71.3 per cent of the variance in Psychological Capital and Individual Work Performance, respectively. All of the proposed hypotheses were supported by the results of the ROH model. The value of the path analysis for each factor was significant. For instance, the path analysis values for the self-efficacy attribute was 0.115, the hope attribute was 0.209 and 0.329 for the resilience attribute. Likewise, the path analysis values for optimism attribute, Psychological Capital, task performance, contextual performance, and counter-productive work behaviour towards Individual Work Performance were 0.230, 0.171, 0.271, 0.454 and 0.157, respectively.

Similarly, the structural model results of the INA data set showed that the model explained 75.6 per cent of the variance in Psychological Capital and 72.0 per cent of the variance in Individual Work Performance (Appendix 4). All of the proposed hypotheses were supported by the results of the model. The value of the path analysis for each factor was significant (self-efficacy = 0.359, hope = 0.365, resilience = 0.137, optimism = 0.095, Psychological Capital = 0.162, task performance = 0.461, contextual performance = 0.258 and counter-productive work behaviour = 0.066) towards Individual Work Performance. Beyond that, the effect sizes ( $f^2$ ) were also calculated, as suggested by Cohen (1988) with  $f^2$  values of 0.02 (small), 0.15 (medium), and 0.35 (large) as a guideline. As shown in Appendix 5, all the calculations revealed that the differences achieved at least a small effect size of  $f^2$  more than 0.02, except for four of the relationships among the constructs that show no effect.

#### 4.4 Between Group Analysis (PLS-based MGA)

After analysing each model for both groups (ROH and INA), the next step was to analyse both groups simultaneously for comparison. Rigdon et al. (2010) developed the differences in path coefficients using a modified independent samples t-test. Specifically, path coefficients' "standard errors are obtained from independent bootstrap analyses of the two models and are used as input variables for the parametric t-test together with the original sample-path coefficients."

For this purpose, PLS-based MGA was applied to examine the variances/differences among responses. PLS-based MGA is suggested over the traditional t-test method for examining the differences among path coefficients. Furthermore, MGA has no restriction over normality distribution (Henseler et al., 2009). MGA analysis is similar to the test of moderation effect, which is based on the path strengths across the groups. In the following Table, the hypothesised path coefficients and their bootstrap values (*t*-value) are shown. It was found that significant differences between-group effect exists. The result of MGA showed that Individual Work Performance is strongly influenced by resilience, which is followed by optimism among ROH workers but the factors are weaker among INA workers. Meanwhile, the result also reflects that Individual Work Performance is strongly influenced by self-efficacy, followed by hopeful attributes for INA workers but weaker among ROH workers. Significant between-group effects were also observed for self-efficacy, hope, and contextual performance constructs but in the opposite direction hypothesised. Besides, the result indicated that there is not much of a difference between both groups, meaning that Psychological Capital is almost at the same level in both ROH and INA workers towards Individual Work Performance. More interestingly, the resilience attribute contributed most to work performance among the ROH workers. On the other hand, INA workers pointed out that self-efficacy or their confidence level at the workplace were the main factors that encouraged their work performance level.

By following the research conceptual framework, the differences between groups (ROH and INA) were observed by examining the PLS-MGA for the Rohingya refugees and Indonesian lower-skilled migrant workers' subsamples. The differences between the path coefficients across the respective two data sets were tested. The results of

prescribed hypotheses related to the group differences for both workers (ROH and INA) are summarised in Table 4 below.

Table 4 : Path Weight Comparisons of Individual Work Performance (ROH and INA Workers)

	Path	ROH Path Coefficient		INA Path Coefficient	t-value	Result
H9	Self-Efficacy -> Psychological Capital	0.114	<	0.359	2.046**	Not Supported
H10	Hope -> [ Psychological Capital	0.209	<	0.365	1.407*	Not Supported
H11	Resilience -> Psychological Capital	0.329	>	0.137	1.999**	Supported
H12	Optimism -> Psychological Capital	0.230	>	0.095	1.381*	Supported
H13	Task Performance -> Individual Work Performance	0.271	<	0.461	1.818*	Not Supported
H14	Contextual Performance -> Individual Work Performance	0.454	>	0.258	1.739*	Supported
H15	Counter Productive Work Behaviour -> Individual Work Performance	0.157	>	0.066	0.986	Not Supported

Notes: \*\*\*P<0.01; \*\*P<0.05; \*P<0.1

## 5.0 Conclusion and Recommendations

This study was motivated by the increasing trend of Rohingya refugees in the Malaysian landscape and the over-reliance of the nation's labour market on migrant workers. In conclusion, the present study is aligned with previous arguments that Rohingya refugees actively contributed to the Malaysian labour market (Nungsari et al., 2020; Nungsari & Flanders, 2018; Todd et al., 2019; Wake & Cheung, 2016). All the Rohingya refugees in this study indicated that they were currently working in various sector economies. Most of them earned a monthly income above the minimum wage, which ranged from RM1001 to RM1500. Interestingly, while access to the labour market is highly restricted for refugees in the Malaysian landscape, they can still make a good income equivalent to Indonesian migrant workers.

Based on the previous studies discussed, this study attempts to provide an understanding of the linkages between Psychological Capital and individual work performance. The Structure Equation Modelling was used and the result showed that all the predictors of Psychological Capital (self-efficacy, hope, resilience, and optimism) had a positive effect on the Individual Work Performance level of Rohingya refugees and Indonesian migrant workers. This result is similar to the recent findings of Huynh & Hua, (2020) on the positive relationship between Psychological Capital and job satisfaction among employees from Vietnamese SMEs. Additionally, the present result is consistent with the findings by Sofija Pajic et al. (2018) who reported the relationship between Psychological Capital and job search self-efficacy in a sample of 330 Syrian refugees in the Netherland and Greece. The results support that individual with higher Psychological Capital are more confidently engaged in a job search.

The discussion revealed the between-group differences. Surprisingly, two important hypotheses regarding between-group differences were not supported. The analysis showed that the results were significant, but not in the proposed direction. In this study, the proposed hypotheses were in the context that Rohingya refugees would perform better and demonstrate strong positive Psychological Capital attributes than Indonesian migrants. Given their protracted situation and more challenging journey, they are more likely to develop stronger behavioural factors or emotional thrive than Indonesian migrants.

However, as displayed in Table 4, only resilience behaviour was significantly different between the two groups at the 0.05 level, followed by optimism behaviour with the significant between-group difference at 0.1 level. In contrast, self-efficacy (significance at 0.05 level) was the stronger factor contributing to the work performance of Indonesian migrants' respondents. Hence, the conclusions drawn from this research that there is not much difference in both groups or in other words, the Psychological Capital attributes are almost at the same level in Rohingya refugees and Indonesian lower-skilled migrants' group of workers. By looking into psychological factors contributing to individual work performance, Rohingya refugees self-reported that they have similar levels of psychological readiness with the Indonesian migrant workers. More interestingly, the resilience factor was in line with our hypothesis, which displayed that most Rohingya refugees believed the factor contributes significantly to their work performance. Rohingya

refugees believed that they could get through difficulties related to work since they have previously experienced such challenges.

Thus, the findings help employers who tend to hire both refugees and migrants' groups to decide how to improve individual work performance by focusing on the critical factors. The current study also introduces PLS-SEM and MGA techniques for group analysis in refugees and economic migrants.

The limitations of the present study are well-acknowledged. This study could not include all possible psychological factors that contribute to work performance. Besides, due to insufficient participation of female participants, a crosstab analysis could not be conducted to assess whether there is a link between gender and psychological factors towards work performance. Future research could also triangulate with employer opinion whether the self-reported evaluation is consistent with employer experience when handling both migrant groups, explicitly focusing on psychological readiness. Future studies may consider exploring new mediating or moderating variable that has potential influence on psychological behaviour towards work performance.

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## Appendix

Appendix 1: Assessment of Discriminant Validity- ROH

	CP	CWB	HOPE	IWP	OPTI	PsyCa p	RESI	SEFI	TP
CP	0.743								
CWB	0.389	0.772							
HOPE	0.515	0.332	0.671						
IWP	0.770	0.465	0.533	0.659					
OPTI	0.502	0.264	0.573	0.448	0.784				
PsyCa p	0.450	0.254	0.622	0.565	0.599	0.702			
RESI	0.466	0.387	0.612	0.549	0.571	0.650	0.692		
SEFI	0.445	0.289	0.695	0.470	0.533	0.560	0.538	0.706	
CP	0.657	0.325	0.564	0.715	0.564	0.553	0.594	0.510	0.758

Appendix 2: Assessment of Discriminant Validity- INA

	CP	CWB	HOPE	IWP	OPTI	PsyCap	RESI	SEFI	TP
CP	0.810								
CWB	0.635	0.887							
HOPE	0.673	0.508	0.768						
IWP	0.773	0.578	0.628	0.785					
OPTI	0.543	0.337	0.682	0.614	0.855				
PsyCap	0.650	0.527	0.819	0.667	0.665	0.808			
RESI	0.689	0.509	0.735	0.715	0.716	0.741	0.796		
SEFI	0.725	0.548	0.803	0.608	0.619	0.813	0.744	0.836	
CP	0.798	0.570	0.618	0.811	0.562	0.656	0.698	0.698	0.856

Appendix 3: Assessments of R2 Level

Path	Full Sample			ROH (n=180)			INA (n=180)		
	R Square	R Square Adjusted	Decision	R Square	R Square Adjusted	Decision	R Square	R Square Adjusted	Decision
Psychological Capital	0.670	0.666	Moderate	0.546	0.564	Moderate	0.756	0.750	Substantial
Individual Work Performance	0.707	0.704	Moderate	0.713	0.706	Moderate	0.720	0.713	Moderate

Appendix 4: Significance and Relevance of the Structural Model Relationships

Path	Full Sample				ROH (n=180)				INA (n=180)			
	Std. Beta	SE	T-value	Result	Std. Beta	SE	T-value	Result	Std. Beta	SE	T-value	Result
H <sub>1</sub> Self-Efficacy -> Psychological Capital	0.271	0.064	4.218***	Supported	0.114	0.079	1.453*	Supported	0.359	0.099	3.992***	Supported
H <sub>2</sub> Hope -> Psychological Capital	0.297	0.050	5.955***	Supported	0.209	0.089	2.356**	Supported	0.365	0.073	5.003***	Supported
H <sub>3</sub> Resilience -> PsyCap	0.217	0.047	4.642***	Supported	0.329	0.079	4.187***	Supported	0.137	0.056	2.454**	Supported
H <sub>4</sub> Optimism -> Psychological Capital	0.147	0.045	3.246***	Supported	0.230	0.087	2.652**	Supported	0.095	0.049	1.951**	Supported
H <sub>5</sub> Task Performance -> IWP	0.383	0.056	6.798***	Supported	0.271	0.073	3.727***	Supported	0.461	0.078	5.877***	Supported
H <sub>6</sub> Contextual Performance -> IWP	0.335	0.059	5.639***	Supported	0.454	0.076	5.944***	Supported	0.258	0.086	3.016**	Supported
H <sub>7</sub> CWB -> IWP	0.086	0.050	1.730**	Supported	0.157	0.065	2.404**	Supported	0.066	0.066	1.004*	Supported
H <sub>8</sub> PsyCap -> IWP	0.160	0.067	2.397**	Supported	0.171	0.068	2.509**	Supported	0.162	0.093	1.739**	Supported

Notes: \*\*\*P<0.01; \*\*P<0.05; \*P<0.1

Appendix 5: Analysis of f<sup>2</sup> effect Size

Path	Full sample(n=360)		ROH (n=180)		INA (n=180)	
	f <sup>2</sup>	Result	f <sup>2</sup>	Result	f <sup>2</sup>	Result
Self-Efficacy -> Psychological Capital	0.080	Small effect	0.014	No effect	0.160	Medium effect
Hope -> Psychological Capital	0.087	Small effect	0.040	Small effect	0.158	Medium effect
Resilience -> Psychological Capital	0.056	Small effect	0.130	Small effect	0.025	Small effect
Optimism -> Psychological Capital	0.033	Small effect	0.067	Small effect	0.016	No effect
Task Performance -> Individual Work Performance	0.187	Medium effect	0.123	Small effect	0.249	Medium effect
Contextual Performance -> Individual Work Performance	0.140	Small effect	0.378	Large effect	0.072	Small effect
Counter Productive Work Behaviour -> Individual Work Performance	0.016	No effect	0.071	Small effect	0.009	No effect
Psychological Capital -> Individual Work Performance	0.049	Small effect	0.069	Small effect	0.048	Small effect