



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Cognitive, Emotional and Social Intelligence towards Job Performance: The Mediator Role of Work Engagement

Jamak Amrollahifar, Mass Hareeza Ali, Zuraina Dato Mansor, Nor Siah Jaharuddin, Guo Yajie

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i7/17219>

DOI:10.6007/IJARBSS/v13-i7/17219

**Received:** 06 May 2023, **Revised:** 08 June 2023, **Accepted:** 22 June 2023

**Published Online:** 04 July 2023

**In-Text Citation:** (Amrollahifar et al., 2023)

**To Cite this Article:** Amrollahifar, J., Ali, M. H., Mansor, Z. D., Jaharuddin, N. S., & Yajie, G. (2023). Cognitive, Emotional and Social Intelligence towards Job Performance: The Mediator Role of Work Engagement. *International Journal of Academic Research in Business and Social Sciences*, 13(7), 376 – 402.

**Copyright:** © 2023 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

**Vol. 13, No. 7, 2023, Pg. 376 – 402**

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Cognitive, Emotional and Social Intelligence towards Job Performance: The Mediator Role of Work Engagement

Jamak Amrollahifar, Mass Hareeza Ali, Zuraina Dato Mansor,  
Nor Siah Jaharuddin

School of Business and Economics, UPM, Malaysia

Guo Yajie

Guangzhou Collage of Technology and Business, China

### Abstract

This study aims to examine the relationship between cognitive, emotional and social intelligence towards job performance among service counter employees in Malaysian local commercial banks. In addition, this study focuses on exploring the mediating effect of work engagement on the relationship of cognitive, emotional and social intelligence with service counter employee's job performance. This study is employed quantitative method whereby the questionnaires are used to gather the data from the population. The data for the present study were collected from a total of 346 service counter employees working in Malaysian local commercial banks located in Kuala Lumpur and Selangor. The mean, standard deviations, correlations, and moderated hierarchical regression analysis were performed in analyzing the data by using the SPSS. Moreover, the results attained, analyzed using the SMART-PLS method, indicate that work engagement significantly mediates the relationships between emotional and social intelligence towards job performance. However; the study illustrates cognitive intelligence does not correlate with work engagement.

**Keywords:** Cognitive Intelligence, Emotional Intelligence, Social Intelligence, Job Performance, Work Engagement

### Introduction

In this era, every single organization attempts to have competitive aspects with a purpose of attaining its own strategic goals and being triumphant at last (Karamustafa & Kunday, 2018). However; it seems that organizations are suffering from increasing employees' job performance in a time of technological transformation of the work environment and also globalization which are increasing daily (Sabie et al., 2020). This leads to the increase of demands for emphasizing the efficiency of managers and employees for optimal performance to develop the organisations eventually (Amadi et al., 2020). To ensure the success of an entire organization, it is crucial to focus on the performance of both representatives and

employees. As noted by Zahra and Kee (2019), employers are constantly seeking ways to enhance job performance. After all, the overall performance of employees is a key driver of organizational success. This underscores the critical role that employees play as valuable assets for any organization. Without their participation, achieving organizational goals would be impossible (Idris et al., 2020). Thus, it is imperative for organizations to identify and address the key factors that can help improve employee performance on a daily basis (Omar et al., 2016).

The Malaysia's performance in Global Competitiveness Report (GCR) ranked Malaysia in the 27th place in 2019 which is dropping dramatically compared to 18th place in 2014-2015 (World Economic Forum). In addition, the Malaysia's performance in the World Competitiveness yearbook (WCY) ranked Malaysia 22nd place in 2019 which is another shocking fact compared to the 14th place in 2015 (Institute for Management Development (IMD)). Moreover, employee performance in the Eleventh Malaysian Plan (2016-2020) indicated a mismatch between factors of knowledge, competences and attitude (Supramaniam & Singaravelloo, 2020). Moreover, in peer groups ranking among 14 countries, Malaysia ranking from 6th in 2016 has also been increased to 8th in 2020.

In Malaysia, the country's economic performance is heavily reliant on the success of its main economic sectors, which include services, manufacturing, construction, agriculture, and mining and quarrying. Specifically, the service sector is the most significant contributor to Malaysia's GDP, accounting for 56.7% in 2018. However, it's important to note that the sector's contribution has remained around 54% for the past five years, indicating a need for more efforts to increase its percentage, which is typically around 80% in developed countries. Recent data from the Department of Statistics Malaysia (DOSM) for Q2 of 2020 showed a total revenue of RM 335.6 billion in the service sector, representing a 24% decline from the same quarter in 2019 (Productivity Report, 2020).

Meanwhile, organizational management often struggles to pinpoint the factors responsible for a decline in employee performance. However, it is critical to consider the various dimensions of employee performance as it impacts the organization's strategy and goals (Idris et al., 2020). While job satisfaction and commitment are important predictors of job performance, studies such as Ree and Earles (2015) suggest that intelligence is the most significant factor in selecting top-performing employees. Currently, there is growing interest among management scholars and practitioners in understanding the psychological factors that boost employee performance (Mohamed, 2021). Given that employees are a critical asset for organizations, high-performing employees are essential to achieving organizational objectives and maintaining a competitive advantage (Ling et al., 2020). Given the demands of today's workplace climate, which require a higher level of cognitive, social, and emotional intelligence from employees, it is recommended that organizations focus on developing different types of intelligence in addition to expert skills to thrive in the new business world (Vasudevan, 2020).

In recent times, there has been a growing interest in practical intelligence, leading to the recognition of various forms of intelligence such as Emotional Intelligence (EI) and Social Intelligence (SI), which are based on Gardner's Theory of Multiple Intelligence (Husin et al., 2013). Studies have revealed that emotional and social intelligence can account for up to 70%

of differences in performance within organizations. Therefore, it is crucial to investigate how poor emotional and social intelligence can negatively impact employee performance (Sabie et al., 2020). Furthermore, cognitive intelligence was identified as the most valid predictor of future performance when hiring employees without prior experience in a job (Schmidt and Hunter, 1998). IQ has been shown to be a valid predictor of job performance across various work fields, although the degree of validity varies (Dhliwayo & Coetzee, 2020).

Emotional intelligence plays an essential role in motivating employees to engage more in team working to enhance their performance (Rahim et al., 2018; Mohamed, 2021). Interestingly, there is evidence that emotional intelligence has a positive impact on work engagement, which, in turn, enhances employee performance (Karamustafa & Kunday, 2018). Engaged employees who are mindful of their job responsibilities and goals are more likely to collaborate effectively and display energy, dedication, and passion for developing their companies (Karamustafa & Kunday, 2018).

The Malaysia's performance in Global Competitiveness Report (GCR) ranked Malaysia in the 27th place in 2019 which is dropping dramatically compared to 18th place in 2014-2015 (World Economic Forum). In addition, the Malaysia's performance in the World Competitiveness yearbook (WCY) ranked Malaysia 22nd place in 2019 which is another shocking fact compared to the 14th place in 2015 (Institute for Management Development (IMD)). Moreover, employee performance in the Eleventh Malaysian Plan (2016-2020) indicated a mismatch between factors of knowledge, competences and attitude (Supramaniam & Singaravelloo, 2020).

This study examined job performance by using a sample of service counter employees in Malaysian local commercial banks. As there is still a need to investigate how to enhance job performance of the employees (Zahra & Kee, 2019); more specifically, evaluating how emotional and social intelligence with cognitive intelligence work together to predict job performance (Nguyen et al., 2019) particularly in different cultural contexts such as Asian culture; this situation may give different perspectives on viewing job performance. Thus, this study contributes to the growing cross-cultural literature on job performance in the context of Asian cultures. Moreover, this study proposed that work engagement mediates the relationship between emotional and social intelligence towards job performance. To the researcher's knowledge, this is the very first study that has empirically attempted to focus on the mediation effect of work engagement in the relationship between cognitive, emotional and social intelligence towards job performance in a banking industry in Malaysia. In this vein, it is the aim of Human Resource Development (HRD) to improve the performance of organization by increasing the productivity of the employees. In this aspect, HRD plays a pivotal role in planning and implementing various trainings and development programs for the improvement job performance (Ismail & Osman-Gani, 2011). The effectiveness of such programs has been supported by evidence that they can enhance both the emotional intelligence and job performance of employees (Kearney et al., 2017). Therefore, it is important for HRD to prioritize the implementation of these programs as a means of improving the overall performance of employees.

### Research Objectives

There are six research objectives addressed in this study as below

1. To determine the relationship between cognitive intelligence on job performance among service counter employees in Malaysian local commercial banks.
2. To determine the relationship between emotional intelligence on job performance among service counter employees in Malaysian local commercial banks.
3. To determine the relationship between social intelligence on job performance among service counter employees in Malaysian local commercial banks.
4. To investigate the mediating effect of work engagement on the relationship between cognitive intelligence towards job performance among service counter employees in Malaysian local commercial banks.
5. To investigate the mediating effect of work engagement on the relationship between emotional intelligence towards job performance among service counter employees in Malaysian local commercial banks.
6. To investigate the mediating effect of work engagement on the relationship between social intelligence towards job performance among service counter employees in Malaysian local commercial banks.

### Literature Review

The notion of cognitive intelligence pertains to the capacity to reason logically and resolve factual, new, and complex issues, and is recognized as a crucial factor for species survival (Gottfredson, 1997; Jensen, 1998; Lam & Kirby, 2002; Rindermann, 2007). Cognitive intelligence involves the capability to think and analyze information and situations, leading to effective or superior performance (Boyatzis & Ratti, 2009). Meanwhile, the emergence of the emotional intelligence theory arose because of the realisation that cognitive intelligence alone could not explain all antecedence of job performance and occupational outcomes. There are also noncognitive aspects that are part of intelligence (Cherniss, 2000). The term "emotional intelligence" refers to a person's capacity to successfully control their feelings and ideas, which enables them to better adapt to and operate in their surroundings (Humphrey et al., 2007; Salovey & Grewal, 2005).

The Mayer ability model is widely recognized as the leading model of emotional intelligence. According to this model, emotional intelligence is a cognitive ability that is distinct from, but related to, general intelligence, and is composed of four skill dimensions: perceiving emotions, using emotions to facilitate thinking, understanding emotions, and managing emotions. While this model is limited to ability-based domains, the Bar-On model takes a more psychological approach to emotional intelligence, defining it as a set of interpersonal skills that impact an individual's behavior in various life events. The Bar-On model emphasizes the interrelatedness of emotional and social abilities, skills, and facilitators, which all work together to help individuals understand themselves and others, express themselves, and cope with daily demands. Similarly, according to Daniel Goleman's mixed model, Emotional Intelligence (EI) is the ability to recognize our own and others' feelings, motivate ourselves, and manage our emotions to improve our personal and relational outcomes. Unlike academic intelligence, EI is considered complementary to it. Goleman and Boyatzis have expanded their model to include social and emotional competencies essential for effective performance in the workplace. More recently, Goleman (2006) and Boyatzis and Goleman (2006) have

renamed the interpersonal clusters as social intelligence (SI) competencies and the intrapersonal clusters as EI competencies.

In 2001, Petrides and Furnham introduced "Trait Emotional Intelligence" (TEI) term, that refers to self-perceived ability and emotion-related behavioural nature (Petrides, 2011) and views Emotional Intelligence as a trait, instead of cognitive ability (Santos et al., 2015). Trait emotional intelligence is defined as self-perception at the lower level of personality hierarchy (Petrides et al., 2007). Petrides et al (2007) claims that this model is deemed as the second generation model of Emotional Intelligence, which is defined as a group of self-perception and behavioural disposition concerning individual ability to recognise, process and employ information related to emotion (Petrides & Furnham, 2003, p. 278). The self-perception and disposition illustrate typical feelings, expression of emotion-laden information, behaviours and thoughts related to the perception, management, regulation, self-motivation, self-control, and optimistic dispositions (Petrides, 2011). Petrides and Furnham's research focuses on a theory of workplace performance, making their approach suitable for the current study. The trait model is a better predictor for emotional labor jobs, like service counter employees in the banking sector (Dhliwayo, 2018).

The current study employed the Trait Emotional Intelligence model for various reasons. Firstly, Trait emotional intelligence is a personality trait, while ability EI belongs to the psychometric intelligence domain. Petrides and Furnham (2001) argue that EI is a trait rather than a cognitive ability, since most aspects of EI are subjective and cannot be measured objectively. In other words, they suggest that there is a theoretical distinction between trait and ability intelligence. Cognitive EI models may relate to cognitive intelligence, whereas trait EI would not be expected to correlate strongly with measures of general cognitive ability. Similarly, behavioral models of emotional intelligence may show moderate relationships with personality, low correlations with cognitive intelligence and high correlations with performance indicators. Secondly, trait Emotional Intelligence is best measured through self-report. It consists of self-perceived abilities and affect-related behavioral tendencies, known as typical-performance. Meanwhile, maximum-performance tests measure actual emotion-related cognitive abilities, which are referred to as maximum-performance. Thirdly, the Bar-On (1997) model is a traditional trait EI model that defines EI as the perception of social and emotional competencies that determine how an individual relates to themselves and others while dealing with environmental demands and pressures. Another trait EI model is the one proposed by Petrides and Furnham (2001), which encompasses emotion-related self-perceptions. Although the Bar-On (1997) model covers EI constructs well, it is not comprehensive. In contrast, the Petrides and Furnham (2001) model covers emotional expression, self-motivation, and emotional regulation in addition to the domains shared with the Bar-On (1997) model. Finally, the ability-based model is criticized for its resistance to scientific measurement and its similarity to IQ-like tests, while the TEI measurement that is measured through self-report questionnaires is straight forward because the construct covers dispositions and self-perceptions that clarify the subjective nature of emotions.

Meanwhile, the study of Social Intelligence (SI) has gained considerable attention from researchers across various fields due to the significance of interpersonal relationships in the workplace. The multi-dimensional nature of the construct has been recognized through several definitions over the years, including cognitive social intelligence, which pertains to the

ability to decode verbal and non-verbal behaviors of others, and behavioral social intelligence, which refers to effectiveness in social situations. However, recent research has shifted its focus from merely describing and assessing SI to understanding the purpose of interpersonal behavior and its role in effective adaptability. According to Boyatzis (2009), Social Intelligence competency entails the ability to recognize, understand, and use emotional information about others to achieve superior performance. This ability to deal effectively with others, as described by Robbins and Judge (2019), is the essence of social intelligence. Moreover, social intelligence plays a crucial role in shaping our brains and affecting our bodies concerning our relationships with bosses, colleagues, family, and friends (DuBrin, 2009).

Work engagement is a construct that has been defined in various ways by researchers, making it difficult to establish a universal definition. Some scholars have conceptualized employee engagement as a cognitive quality, a commitment emotion, or a positive behavioral state that is directed towards achieving organizational outcomes, including the actions taken by employees to ensure success (Tepayakul & Rinthaisong, 2018). The idea of work engagement was first proposed by Maslach and Leiter and later developed by Schaufeli et al. It aligns with the principles of positive psychology, and it refers to a positive, fulfilling, and work-related state of mind that is characterized by three components: vigor, dedication, and absorption. Vigor refers to the energy and resilience that an individual brings to their job, their willingness to invest effort in work-related tasks, and their persistence in completing them. Dedication, on the other hand, is characterized by strong involvement in one's job, enthusiasm, pride, and inspiration. Lastly, absorption is when an individual is happily engrossed in their work to the extent that time passes quickly, and it is difficult for them to detach from their work. According to Robinson & Judge (2017), work engagement is the extent to which an individual feels engaged, satisfied, and enthusiastic about their job. Work engagement encompasses various consequences in the workplace, and other variables that may support an organization's goals. It is arguable that creating a positive attitude towards work and maximizing an employee's potential can foster employee engagement (Sulistyo & Suhartini, 2019). Engaged employees are highly motivated and devoted to the growth of the organization (Acharya & Agrawal, 2020). Work engagement is a workplace approach that aims to ensure that employees are committed to their organization's values and goals and motivated to contribute to organizational success (Tepayakul & Rinthaisong, 2018).

Job performance is a crucial variable in the field of industrial management and organizational behaviour, and it has been extensively studied (Carpini, Parker, & Griffin, 2017). Despite this, there has been limited progress in defining the nature of job performance and specifying the processes that link individual behaviours to organizational value (López-Cabarcos et al., 2021). In this study, we used the Role Based Performance measure to assess job performance. This theory combines psychological and sociological perspectives to understand how roles shape behavior. Roles have long been recognized as a key factor in shaping employee behavior within organizations (Katz & Kahn, 1978). Role theory and identity theory were used to develop a theory-based measure that accounts for multiple roles in the workplace. Role theory highlights the importance of considering multiple roles in performance management to avoid measurement errors in performance appraisals. However, while employees perform multiple roles in their organizations, most research has measured job performance as if employees only have one role. Identity theory helps determine which dimensions of roles should be included in a multidimensional measure of job performance.

### Hypothesis

Motowidlo et al (1997) expanded upon the research of Campbell et al. and concurred that cognitive ability plays a dominant role in task performance, while personality largely influences contextual performance. This perspective was largely supported by (Motowidlo and Scotter, 1994). Researchers generally agree that human cognitive abilities are a major determinant of job performance variability (Hunter, 1983; Murphy & Shiarella, 1997; Wagner, 1997). Measures of general cognitive ability are often viewed as efficient predictors of job performance and occupational success. Studies have shown that cognitive ability not only has a direct impact on job performance, but it also indirectly influences performance through its effects on job knowledge, particularly in tasks requiring skilled performances (Sonnetag & Frese, 2002). Meta-analytic evidence suggests a strong relationship between cognitive ability and job performance, with high cognitive ability individuals performing better than those with low cognitive ability across different jobs (Bobko et al., 1999; Hunter & Hunter, 1984; Schmidt & Hunter, 1998). Most authors assume that cognitive ability helps acquire job knowledge and skills, which in turn have a positive impact on job performance (Sonnetag & Frese, 2002). There is a correlation between cognitive ability and performance on demanding attentional tasks, possibly due to the association between ability and supervisory executive processing (Matthews et al., 2014). For instance, Boyatzis et al (2012) found that cognitive intelligence significantly predicts sales leader performance. Similarly, Offermann et al (2004) explored the relative contribution of cognitive and emotional capabilities to individual and team performance outcomes in the same population and tasks.

Historically, organizational performance has been associated with cognitive factors such as IQ or general intelligence, while emotional intelligence has only recently gained attention as a useful construct (Schmidt & Hunter, 1998; Offermann et al., 2004). Emotional intelligence complements traditional intelligence measures and has the potential to impact attitudes, behaviors, and outcomes. According to George and Brief (1996), employees' ability to use emotions to facilitate performance influences job performance. High emotional intelligence enables employees to regulate their own emotions and manage others' emotions, leading to positive interactions and organizational citizenship behaviors that contribute to performance (Mossholder et al., 1981; Wong and Law, 2002). Lyons and Schneider (2005) found that high levels of emotional intelligence promote challenge appraisals and better performance, while low levels foster threat appraisals and worse performance. Effective emotional regulation, both antecedent and response-focused, and adept management of interactions with others are essential components of high emotional intelligence (Husin et al., 2013).

According to Eze et al (2019), emotional intelligence is a significant factor that directly affects the job performance of service counter employees in microfinance banks in Lagos. They emphasized that emotional intelligence plays a crucial role in driving the job performance of service counter employees in the microfinance sub-sector. In a similar vein, Naeem (2008) conducted a study to explore the relationship between emotional intelligence and service quality in foreign and local banks. The study found that foreign banks tend to have higher emotional intelligence levels. Furthermore, employees with high emotional intelligence tend to enhance service quality (Karthikeyan & Lalwani, 2017). Additionally, Heffernan (2008) investigated the impact of emotional intelligence and trust on bank performance using an internet survey. The study revealed that trust comprises three key components, namely dependability, knowledge, and expectations. Significant correlations were observed between



both trust and emotional intelligence, and the financial performance of a relationship manager. Meanwhile, Rahim (2010) found in his study on emotional intelligence and organizational performance among the banking sector in Pakistan that female employees tend to have higher levels of emotional intelligence than their male counterparts. The study also revealed that higher levels of education are associated with higher levels of emotional intelligence (Karthikeyan & Lalwani, 2017). Thavaraj (2012) studied emotional intelligence among managers of commercial banks in Madurai city and found that self-motivation played a significant role in determining emotional intelligence. Moreover, urban branches tend to have higher levels of emotional intelligence compared to rural branches. Finally, Radha (2013) conducted a study on customer orientation as a mediator between emotional intelligence and service performance in banks (Karthikeyan & Lalwani, 2017).

Numerous literatures have established a positive correlation between social intelligence and employee performance in a given task. Jex (2002) reported that employee behaviors in the workplace are crucial, while Goleman (2005) supported this claim and argued that emotionally intelligent individuals tend to perform better in organizations. The research culture in organizations is also influenced by job performance, as revealed by (Scullen et al., 2000). High job performance leads to team effectiveness, recognition, employee retention, and a positive attitude towards work (Lathesh & Avadhani, 2018). Various studies have also been conducted to explore the relationship between social intelligence and different factors. For instance, Saxena and Jain (2013) studied social intelligence among graduate college students in Bhilai, India, while Ebrahimpoor et al (2013) examined the relationship between social intelligence and organizational performance among managers of Ardabil regional water company in Iran. Jug (2015) investigated personality traits, social intelligence, social support, and juvenile delinquency in Slovenia, while Dhanda and Ninaniya (2017) studied the dimensions of social intelligence of adolescents in Panipat district of Haryana in India. In addition, Eketu and Edeh (2015) studied the relationship between social intelligence and employee intention to stay in Port Harcourt city, Nigeria (Amadi et al., 2020).

Based on the aforementioned arguments, it is evident that service employees with high emotional and social intelligence tend to be more attentive to the needs of their global customers, resulting in better service offerings. In successful service encounters, employees with high emotional and social intelligence tend to achieve better work performance, leading to higher levels of work performance overall (Husin et al., 2013). Thus, the current study hypothesizes that:

- H1: There is a positive significant relationship between cognitive intelligence and job performance among service counter employees in Malaysian local commercial banks.
- H2: There is a positive significant relationship between emotional intelligence and job performance among service counter employees in Malaysian local commercial banks.
- H3: There is a positive significant relationship between social intelligence and job performance among service counter employees in Malaysian local commercial banks.

Work engagement has been shown to have a positive impact on both employees and organizations. Engaged employees tend to perform better than their disengaged counterparts (Demerouti & Cropanzano, 2010). This is due to their positive emotions, such as happiness, joy, and enthusiasm, which have been found to broaden employees' thought-action

repertoires and build their personal resources, such as physical, intellectual, social, and psychological resources (Fredrickson, 2001). Joy, for instance, inspires playfulness and creativity, while interest motivates employees to explore new opportunities and experiences. Positive emotions are commonly experienced by engaged employees, leading to greater sensitivity to opportunities, increased outgoingness and helpfulness towards others, and higher levels of confidence and optimism (Schaufeli & Van Rhenen, 2006; Cropanzano & Wright, 2001).

Research conducted by Bakker and Bal (2010) demonstrated that engaged teachers tend to receive higher performance ratings from their supervisors, suggesting that engagement translates into better job performance and a willingness to go above and beyond what is expected. Additionally, Osman M. Karatepe (2013) found that work engagement plays a mediating role in the relationship between high-performance work practices and frontline hotel employee performance in Romania. Therefore, based on the above evidence, it is clear that fostering work engagement among employees can lead to a range of benefits for both individuals and organizations. Hence, the following hypotheses are developed:

- H4: Work engagement mediates the relationship between cognitive intelligence and job performance among service counter employees in Malaysian local commercial banks.  
 H5: Work engagement mediates the relationship between emotional intelligence and job performance among service counter employees in Malaysian local commercial banks.  
 H6: Work engagement mediates the relationship between social intelligence and job performance among service counter employees in Malaysian local commercial banks.

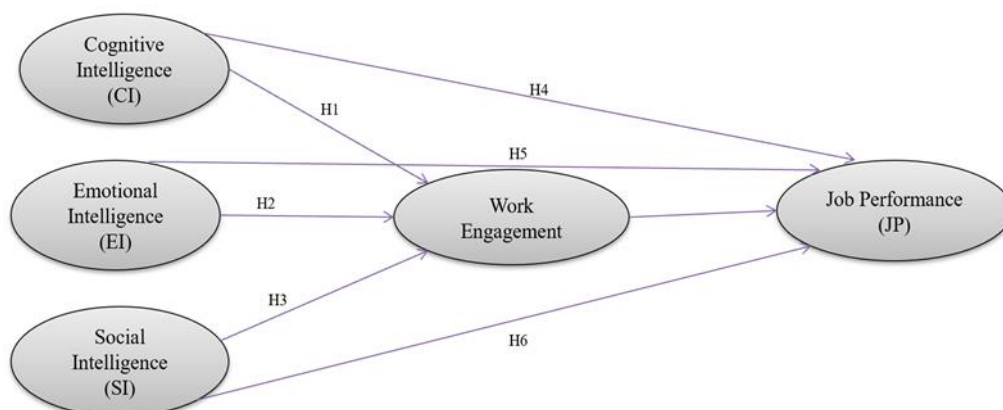


Figure 1. Conceptual framework

### Sampling and Procedures

The participants of this research are service counter employees in Malaysian local commercial banks located in Kuala Lumpur and Selangor areas. This selection was made because these regions have the highest volume of business activities and transactions in the country (Ashfaq et al., 2020). According to Randstad's 2018 report, the top five banks in Malaysia are Maybank, CIMB, Public Bank, RHB Bank, and Hong Leong Bank, with 393, 294, 259, 278, and 329 branches, respectively (Ashfaq, Mustapha, et al., 2020). Since these banks are considered as Malaysian local commercial banks, they were chosen for the study of job performance in

the Malaysian banking sector. However, obtaining a comprehensive list of service counter employees working in Malaysian local commercial banks was difficult, and the researcher used non-probability sampling.

In this study, G\*Power 3.1 software utilized for a priori analysis (Cohen, 1988). In total, 450 questionnaires were distributed among employees, and a structured questionnaire was used to conduct the survey. After one week, completed questionnaires were collected, and follow-up efforts were made through phone calls, emails, and text messages. Out of 450 questionnaires, 362 were returned, resulting in an effective response rate of 80.44%. After examining the responses, 16 questionnaires were excluded due to incomplete and invalid data, leaving a total of 346 usable questionnaires.

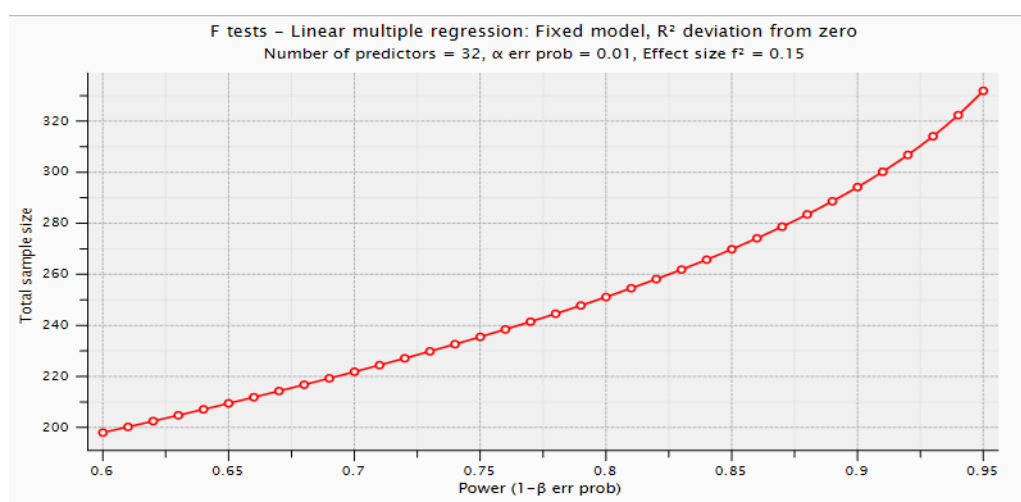


Figure 2: Statistical power in a Complex Model (Extracted from:G\*Power 3.1 software)

In total, 450 questionnaires were distributed among employees, and a structured questionnaire was used to conduct the survey. After one week, completed questionnaires were collected, and follow-up efforts were made through phone calls, emails, and text messages. Out of 450 questionnaires, 362 were returned, resulting in an effective response rate of 80.44%. After examining the responses, 16 questionnaires were excluded due to incomplete and invalid data, leaving a total of 346 usable questionnaires.

This study employed the survey method, which involves the collection of numerical data to describe the behaviour of a sample population (Creswell, 2014). The survey method is appropriate for providing numerical data to support generalizations and inferences about the population. Questionnaires are a common tool for collecting descriptive or explanatory data related to attitudes, opinions, or organizational practices, which can be used to identify and explain variability in different phenomena (Saunders et al., 2009).

### Measurements

To measure cognitive intelligence in this study, a shortened version of Raven's advanced progressive matrices was selected. The participants were required to complete 15 perceptual problems. Trait Emotional Intelligence was measured using the Trait Emotional Intelligence Questionnaire- Short Form (TEIQue-SF) (Petrides, 2009). The TEIQue-SF consists of 24 items designed to measure three categories: well-being, self-control, and emotionality. Previous

studies have reported Cronbach alpha reliabilities ranging from 0.70 to 0.87 (Petrides et al., 2016; Petrides et al., 2014). Social intelligence was measured using the Tromsø Social Intelligence Scale (TSIS), which included 21 items in three dimensions: Social Information Processing (SIP), Social Skills (SS), and Social Awareness (SA). Social Information Processing involves the ability to predict other people's behaviors and understand how they feel and what they wish for, and predict their reaction to one's behavior. Social Skills refers to the ability to have a good conversation with other people, while social awareness concerns the ability to understand others and predict their behavior.

The most commonly cited measurement scale for measuring work engagement is the Utrecht Work Engagement Scale or UWES. This study utilized the UWES-S9 scale developed by Schaufeli et al. (2006), which consists of three dimensions in the form of vigor, dedication, and absorption. Overall, UWES-S9 has 9 items, with vigor having three items, dedication having three items, and absorption comprising three items. The last section of the questionnaire focused on measuring employees' job performance, which was measured using the Role-Based Performance Scale (RBPS) developed by Welbourne et al. (1998). The RBPS contains 20 items measuring five dimensions of job performance: Job Role, Career Role, Innovator Role, Team Role, and Organization Role. The responses were collected using a five-point response format ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

### Data Analysis

Table 1 shows the demographic items of the questionnaire, which included gender, age, race, religion, marital status, level of education, and job tenure. The data revealed that the largest age group among the respondents was those aged 31-40 years, which represented 160 (46.2%) participants. The next largest age group was respondents aged 41-50 years, comprising 102 (29.4%) participants, followed by those aged less than 30 years, which accounted for 77 (22.2%) participants. Only 7 (2.2%) of the respondents were over 50 years old. Among the 346 participants, the majority were female, representing 218 (63%) of the sample. The distribution of races was predominantly Malay, with 241 (69.7%) respondents, followed by Chinese with 72 (20.8%) participants, Indian with 29 (8.3%) participants, and other races with 4 (1.2%) participants. Based on the analysis of religion, the majority of respondents were Muslim, comprising 241 (69.9%) of the participants, followed by Buddhism with 60 (17.3%) respondents, Hinduism with 25 (7.2%) respondents, and Christianity with 20 (5.8%) respondents. Regarding marital status, most of the participants, 272 (78.7%), were married, while 65 (18.8%) were single, and only a few respondents were divorced (7 or 2%) or widowed (2 or 0.5%). Examining the level of education, the majority of the respondents, 234 (67.6%), had a degree, followed by 67 (19.4%) with a diploma, 25 (7.2%) with the Malaysian Certification of Education or SPM, and 20 (5.8%) with a master's degree. Finally, concerning job tenure, the highest number of respondents, 138 (39.9%), had between one to five years of experience, followed by 133 (38.4%) with six to ten years of experience, while 75 (21.7%) had more than ten years of experience on the job.

Table1

*Demographics of the Survey Respondents*

Demographic Profile	Information	Frequency(n)	Percentage (%)
Age	Less than 30 years	77	22.2
	31-40 years	160	46.2
	41-50 years	102	29.4
	More than 50 years	7	2.2
	Total	346	100.0
Gender	Male	128	37.0
	Female	218	63.0
	Total	346	100.0
Race	Malay	241	69.7
	Chinese	72	20.8
	Indian	29	8.3
	Others	4	1.2
	Total	346	100.0
Religion	Islam	241	69.7
	Buddhist	60	17.3
	Hinduism	25	7.2
	Christianity	20	5.8
	Total	346	100.0
Marital Status	Single	65	18.8
	Married	272	78.7
	Divorced	7	2.0
	Widowed	2	0.5
	Total	346	100.0
Educational Level	SPM	25	7.2
	Diploma	67	19.4
	Degree	234	67.6
	Master	20	5.8
	Total	346	100.0
Job Tenure	1-5 years	138	39.9
	6-10 years	133	38.4
	More than 10 years	75	21.7
	Total	346	100.0

This study employed the Statistical Package for Social Science version .22 and Structural Equation Modelling (PLS-SEM) version 3.0. The research model is assessed using a two-step process which are; the assessment of the measurement model (outer model) and the assessment of the structural model (inner model). In this research, the constructs of social

intelligence and work engagement were identified as reflective models due to their similar nature, whereas emotional intelligence and job performance were determined to be formative constructs. The internal consistency of the reflective measurement model was validated through various tests, including the Dhillon-Goldstein Rho, indicator reliability, convergent validity, and discriminant validity (Hair et al., 2014).

Table 2 displays the indicators loading, composite reliability (CR), and average variance extracted (AVE) of the reflective constructs. A loading value equal to or greater than 0.708, as suggested by Hair et al (2014), indicates that a latent variable can account for at least 50% of an indicator's variance. However, items with loadings below 0.708 to 0.60 were still included in this study. According to Byrne (2010), loading values equal to or greater than 0.5 are acceptable if they result in high loading scores, leading to AVE scores above 0.5 (Byrne, 2012; Fornell & Larcker, 1981).

In summary, for this study, composite reliability (CR) values above 0.7 and average variance extracted (AVE) values above 0.5 are considered satisfactory (Hair et al., 2012). All the observed constructs' composite reliability in this study exceeded the minimum threshold of 0.7, and all AVEs were greater than 0.5 (Hair et al., 2014). Therefore, the constructs satisfied the reliability and convergent validity criteria.

Table 2

*Composite Reliability and Convergent Validity of the Constructs*

<b>Indicators</b>	<b>Scale</b>	<b>Loadings</b>	<b>CR</b>	<b>AVE</b>
<b>Social Intelligence</b>	Reflective		0.954	0.501
<b>Q25</b>		0.662		
<b>Q26</b>		0.500		
<b>Q27</b>		0.635		
<b>Q28</b>		0.725		
<b>Q29</b>		0.744		
<b>Q30</b>		0.666		
<b>Q31</b>		0.764		
<b>Q32</b>		0.627		
<b>Q33</b>		0.605		
<b>Q34</b>		0.741		
<b>Q35</b>		0.715		
<b>Q36</b>		0.774		
<b>Q37</b>		0.776		
<b>Q38</b>		0.699		
<b>Q39</b>		0.786		
<b>Q40</b>		0.757		
<b>Q41</b>		0.680		
<b>Q42</b>		0.768		
<b>Q43</b>		0.768		
<b>Q44</b>		0.741		
<b>Q45</b>		0.661		

<b>Work Engagement</b>	Reflective	0.906	0.518
<b>Q46</b>		0.733	
<b>Q47</b>		0.739	
<b>Q48</b>		0.682	
<b>Q49</b>		0.720	
<b>Q50</b>		0.697	
<b>Q51</b>		0.733	
<b>Q52</b>		0.690	
<b>Q53</b>		0.737	
<b>Q54</b>		0.745	

The study also evaluated the discriminant validity of the reflective measurement model. Discriminant validity confirms that a construct is unique and not represented by other constructs in the model (Hair et al., 2014). To assess discriminant validity, this study used the Hetero-trait-Monotrait (HTMT) ratio of correlations. HTMT is the ratio of correlations within the constructs to correlations between the constructs (Dijkstra & Henseler, 2015; Hair et al., 2014). The results showed in Table 6 revealed that all reflective constructs had passed the HTMT.90 (Gold et al., 2001) and the HTMT.85 (Kline, 2011), indicating that the discriminant validity of the model has been confirmed.

Table 3

*Discriminant Validity using Heterotrait-Monotrait (HTMT) Criterion*

	<b>Cognitive Intelligence</b>	<b>Social Intelligence</b>	<b>Work engagement</b>
<b>Cognitive Intelligence</b>			
<b>Social Intelligence</b>	0.314		
<b>Work engagement</b>	0.266	0.806	

The study also assessed collinearity among the indicators and the significance and relevance of outer weights for both reflective and formative constructs. For reflective constructs, the collinearity among indicators was measured using the Variance Inflation Factor (VIF). A VIF value of 5 and higher suggests a potential collinearity issue. The VIF values in Table 4 were below the threshold of 5, indicating that collinearity is not a problem for any of the reflective constructs.

On the other hand, the significance and relevance of outer weights were examined for formative constructs. While some indicators were not significant, they were retained in the model based on previous research supporting their relevance in measuring job performance. Dropping these indicators may result in poor content validity.

Furthermore, the structural model was evaluated using lateral collinearity (VIF), path coefficient, coefficient of determination (R<sup>2</sup>), effect size (f<sup>2</sup>), and predictive relevance (Q<sup>2</sup>).

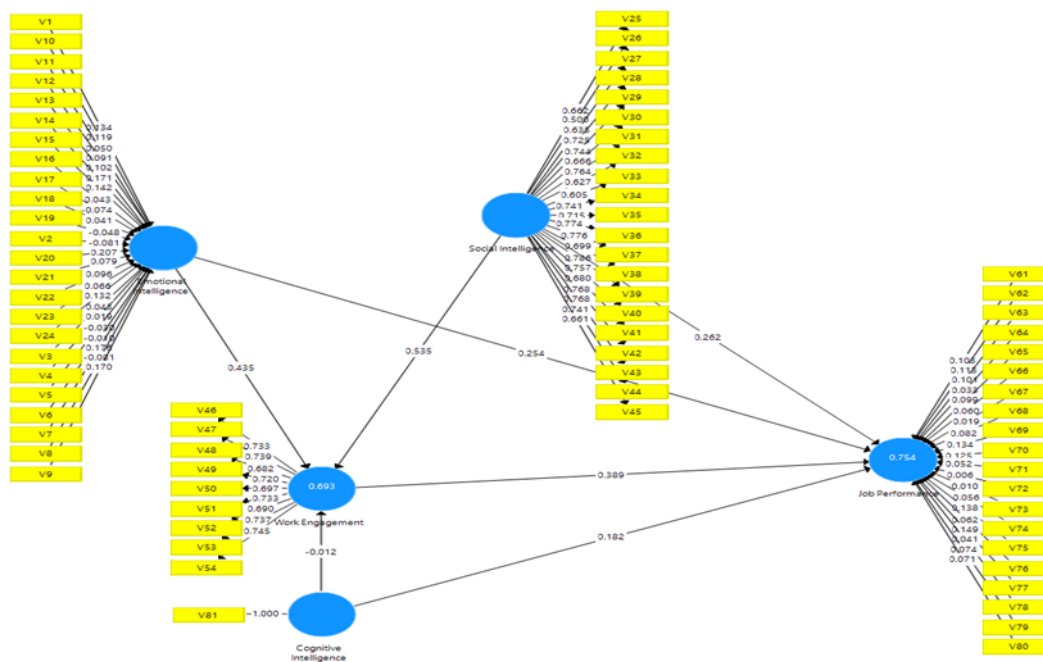


Figure 3: Structural Model

Before examining the structural model, it is important to verify that there are no lateral collinearity problems. In other words, we need to make sure that there is no high correlation among the independent variables. According to Hair et al (2014), a VIF value of 5 or higher suggests the presence of lateral multicollinearity issues. However, as shown in Table 5.6, the VIF values for each individual construct in the First and Second Set (Cognitive intelligence/ Emotional intelligence/ Social intelligence/ Work engagement) are consistently below the threshold value of 5. Therefore, we can conclude that lateral multicollinearity is not a concern in this study.

Table 4  
Lateral Collinearity Assessment

First Set		Second Set	
Construct	VIF	Construct	VIF
Cognitive Intelligence	1.189	Cognitive Intelligence	1.099
Emotional Intelligence	2.577	Emotional Intelligence	1.159
Social Intelligence	4.115	Social Intelligence	1.225
Work Engagement	3.738		

Note: VIF<5; First set are tested on dependent variable of Job Performance and second set are tested on dependent variable of Work Engagement.

The path-coefficient plays a crucial role in determining the significance of hypothesized relationships between the constructs. In this study, six direct hypotheses were developed to investigate the relationships between the constructs (refer to table 5). To assess the level of



significance, t-values for all paths were generated using bootstrapping in SmartPLS. The t-statistic was run on a sample size of 346 respondents, and the six direct hypotheses were tested for significance. The results indicated a significance level of 0.05 or higher, with a value of  $\geq 1.645$ . Based on the path coefficient assessment, it was found that five out of six hypothesized relationships had t-values  $\geq 1.645$  and were therefore deemed significant at the 0.05 level.

Table 5  
*Path-Coefficient Assessment (N=346)*

Hypothesis	Relationship	Mean	Beta	Std Beta	t-value	p-value	Result
H1	CI -> WE	-0.015	-0.012	0.031	0.372	0.710	Not Significant
H2	EI -> WE	0.456	0.435	0.033	13.069**	0.000	Significant
H3	SI -> WE	0.515	0.535	0.035	15.468**	0.000	Significant
H4	CI -> JP	0.177	0.182	0.035	5.230**	0.000	Significant
H5	EI -> JP	0.270	0.254	0.042	5.996**	0.000	Significant
H6	SI -> JP	0.261	0.262	0.047	5.551**	0.000	Significant

Hair et al (2014) suggest that the R2 value reflects the amount of variance in the endogenous construct that can be accounted for by all the exogenous constructs linked to it. The R2 value of 0.754 for the exogenous construct (i.e. job performance) indicates that cognitive, emotional and social intelligence, and work engagement contribute to 86% of the variance in job performance. As per Hair (2014), acceptable R2 values depend on the complexity of the model and research field, and it can be difficult to justify the interpretation of R2 scores. According to Hair et al. (2013), an R2 score of 0.75 is considered substantial, 0.50 is moderate, and 0.25 is weak. Therefore, in this study, the R2 value is substantial.

In order to determine the effect size in this study, Cohen (1988) recommends using values of 0.02, 0.15, and 0.35 to represent small, medium, and large effects, respectively. The effect sizes of cognitive intelligence (0.120), emotional intelligence (0.136), and social intelligence (0.120) in producing the R2 for job performance were found to be small, while work engagement (0.188) had a medium effect. However, Hair et al (2010) suggests that the acceptability of the rules of thumbs for producing a high f2 is difficult to ensure, as effect size depends on the complexity of the research model and the research discipline. Moreover, Sullivan and Feinn (2012) proposed that effect size is typically small due to the complexity of a research model and the specific conditions of industries.

To examine the predictive power of exogenous constructs over the endogenous constructs, the blindfolding procedure was used to evaluate predictive relevance Q2. According to Hair et al (2014), if the Q2 value is greater than 0, this indicates that the exogenous constructs have predictive ability on the endogenous constructs, also known as cross-validated redundancy. In this study, the endogenous construct, job performance (0.297), had a Q2 value greater than 0, indicating the predictive relevance and validity of the model.

The path-coefficient serves as a tool to evaluate the significance of expected connections among constructs. The model under investigation involved three direct hypotheses concerning the relationship between the constructs (refer to table 6). To determine the level of significance using SmartPLS, t-values were calculated for all paths through bootstrapping. Upon running the t-statistic with a sample size of 346 respondents and six main direct hypotheses, the resulting value was  $\geq 1.645$ , indicating statistical significance at the 0.05 level. After evaluating the path coefficient, two relationships were discovered to have t-values  $\geq 1.645$ , demonstrating statistical significance at the 0.05 level.

Table 6  
*Path-Coefficient Assessment (N=346)*

Hypothesis	Relationship	Mean	Beta	Std Beta	t-value	p-value	Result
H1	CI -> WE	-0.015	-0.012	0.031	0.372	0.710	Not Significant
H2	EI -> WE	0.456	0.435	0.033	13.069**	0.000	Significant
H3	SI -> WE	0.515	0.535	0.035	15.468**	0.000	Significant

This study explores the mediating effect of work engagement on the relationship between cognitive, emotional, and social intelligence and job performance using the Preacher and Hayes (2008) procedure. This involves a 2-step approach that uses bootstrapping: First, the significance of the direct effect is checked without the mediator work engagement in the model. Second, the significance of the indirect effect and associated T-Values are checked using the path coefficients when the mediator work engagement is included in the model.

The findings presented in Table 7 indicate that work engagement acts as a partial mediator in the link between emotional intelligence ( $\beta = 0.169$ , t-value = 6.270  $p < 0.05$ ), and social intelligence ( $\beta = 0.208$ , t-value = 6.550  $p < 0.05$ ) with job performance, thereby supporting H5 and H6. However, there was no evidence to suggest that work engagement mediates the relationship between cognitive intelligence ( $\beta = -0.004$ , t-value = 0.379  $p < 0.05$ ) and job performance (H4).

Table 7  
*Assessment of Mediation Effects*

Hypothesis	Relationship	Mean	Beta	Std Beta	t-value	p-value	Result
H4	CI*WE $\rightarrow$ JP	-0.005	-0.004	0.012	0.379	0.705	Not Significant
H5	EI*WE $\rightarrow$ JP	0.174	0.169	0.027	6.270**	0.000	Significant
H6	SI*WE $\rightarrow$ JP	0.196	0.208	0.032	6.550**	0.000	Significant

### Discussions and Conclusions

The study findings indicate a positive relationship between cognitive intelligence and job performance. This is consistent with existing literature on the subject, including numerous meta-analyses conducted in the past decade (Cote & Miners, 2006; Gottfredson, 1997; Jensen, 1998; Joseph & Newman, 2010; Lam & Kirby, 2002; O'Boyle et al., 2011; Rindermann, 2007; Dhliwayo & Coetzee, 2020). The present study also aligns with Nguyen et al.'s (2019) findings on the importance of cognitive intelligence in explaining job performance. Individuals with higher cognitive intelligence tend to acquire more job-related knowledge, which positively affects job performance (Joseph & Newman, 2010). Additionally, Gottfredson (2002) found cognitive intelligence to be a significant predictor of job performance, accounting for 25% of the variance. Schmidt and Hunter (2004) also found cognitive abilities to be a strong predictor of work-related accomplishments. In comparison, cognitive intelligence outperformed talent, personality traits, and dispositions in predicting job performance. Hunter and Hunter (1984) emphasized the importance of cognitive intelligence in predicting work performance, while Byington and Felps (2010) demonstrated the role of cognitive intelligence in enhancing learning capabilities in work-related training programs. These findings support Spearman's recommendation of using "general mental abilities" in predicting individuals' performance, and Ree and Earles (1992) suggested using intelligence-based criteria for hiring to ensure maximum performance in academia and the industrial sector. Schmidt (2002) also emphasized the critical association between cognitive abilities and performance in the workplace while introducing performance appraisal mechanisms.

The present study has revealed that emotional intelligence and social intelligence have a significant positive relationship with employee job performance. This finding is consistent with previous research that has shown a correlation between emotional intelligence and job performance (Goleman, 1995; Radhakrishnan & Udaya-Suriyan, 2010; Cherniss, 2001; Harms & Credé, 2010; Vivian-Tang et al., 2010; Shipley et al., 2010; Hur et al., 2011; Lopez-Zafra et al., 2012; Boyatzis et al., 2012; Supramaniam & Singaravelloo, 2021). The study by Supramaniam and Singaravelloo (2021) in the Malaysian public sector has also found that emotional intelligence has a positive impact on organizational performance. Similarly, Castillo and Del Valle (2017) have demonstrated that employees in low-skilled back-office positions with higher emotional intelligence exhibit better job performance. Roy and Tiwari (2019) have shown a significant relationship between emotional intelligence and job performance. Wu (2011) has also found that emotional intelligence significantly predicts job performance (Dhliwayo & Coetzee, 2020). People with high emotional intelligence have been found to perform better on difficult and frustrating tasks than those with low emotional intelligence (Schutte et al., 1998; Dhliwayo & Coetzee, 2020). Emotional intelligence has been found to predict job performance better in high emotional than in low emotional labour jobs (Joseph & Newman, 2010; O'Boyle et al., 2011; Dhliwayo & Coetzee, 2020). Kearney et al. (2017) have extended the emotional intelligence theory by showing that emotional intelligence drives customer-related organizational performance by influencing employee behavior. They found that both front-line and back-office employees' behavior and their emotional intelligence affect financial and non-financial performance.

Meanwhile, Roy & Tiwari (2019) found that employees with good social competency tend to have better team building and relationships, which ultimately leads to achieving their goals. This finding is consistent with Sabuhari et al.'s (2020) study, which showed that employee competency has a positive impact on performance, particularly when intellectual, emotional,

and social skills are implemented. However, Ling et al (2020) reported contradictory findings, suggesting that social intelligence does not significantly influence performance. Similarly, Castillo & Del Valle (2017) found that interpersonal skills, which are related to social intelligence, were not significantly related to performance. One possible explanation for these discrepancies is that emotional intelligence and social intelligence complement each other. Adetula (2016) found that social intelligence has a significant relationship with performance when combined with emotional and cognitive intelligence. It is important to note that when social intelligence is tested separately, its impact may not be significant. Additionally, workplace environment and other factors may also play a role in the relationship between social intelligence and performance. Sreeja and Nalinilatha (2017) found that a healthy work environment is necessary for the development of social intelligence, and when such an environment is absent, social intelligence may not have a significant relationship with performance.

Moreover, the findings on the mediation effect confirmed that work engagement significantly mediates emotional intelligence and social intelligence towards job performance; However, this study does not support the mediation effect of work engagement on the relationship between cognitive intelligence towards job performance (see figure 4).

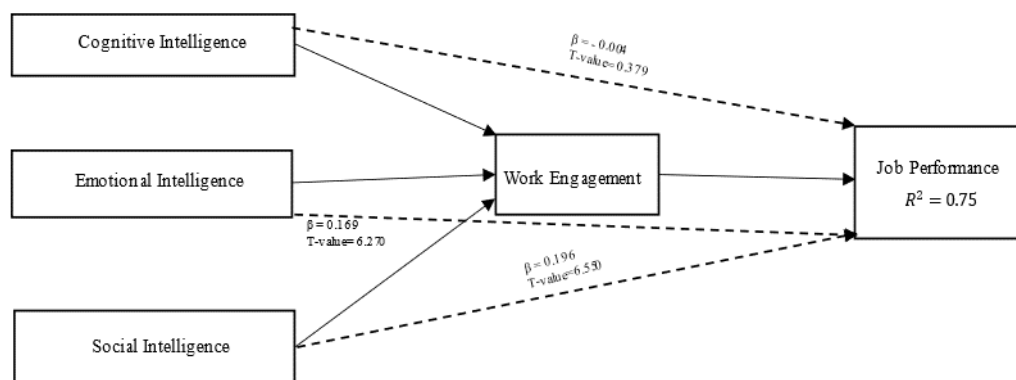


Figure 4: Summary of Mediation Effects

The concept of work engagement was first proposed by Maslach and Leiter (1997) and further developed by Schaufeli et al (2002) in line with the positive psychology movement (Extremera et al., 2018). The present study supports the idea that work engagement can act as a mediator between high-performance work practices and employee performance, as suggested by Karatepe (2013) in the context of frontline hotel employees in Romania. This is consistent with the findings of Zahra and Kee (2019) who demonstrated that emotional intelligence, via work engagement, can enhance job performance among Pakistani bank employees. Moreover, research by Seipp (1991) indicated that individuals who are emotionally aware can reduce anxiety in the workplace, perform more productively, and manage their own and others' emotions effectively. There is also a positive correlation between employee engagement and performance, as noted by (Karamustafa and Kunday, 2018). Petrides (2009) further suggested that people with high levels of emotionality can perceive and express emotions, use them to develop and maintain relationships, and demonstrate better performance in their work. Additionally, socially intelligent individuals can communicate effectively and manage the emotional states of others, which is reflected in their adaptability, intrinsic motivation, and ability to uphold their rights and responsibilities (Ruslan, 2018). Meanwhile, the current study is consistent with Lee and Yoo's (2021) research, which showed

how service counter employees' relational resources, such as social capital, can influence work engagement and ultimately drive performance. Similarly, Young et al (2018); Tisu et al (2020) found that a better understanding of individual differences can facilitate work engagement. The JD-R model further suggests that work engagement allows the translation of resources into job performance (Bakker & Demerouti, 2017). However, the present study does not support the broaden-and-build theory (Fredrickson, 2001) that suggests positive emotions experienced by engaged employees can build personal resources such as cognitive intelligence, as suggested by (Schaufeli and Rhenen, 2006).

The practical and theoretical implications of this study are significant. By examining the relationship between cognitive, emotional, and social intelligence through work engagement and job performance in the banking industry in Malaysia, this study expands the literature on job performance. Although research on job performance is increasing, findings from studies conducted in Western countries cannot be generalized to other regions of the world, such as Asia, and to specific industries, such as banking. Furthermore, this study integrates Self-Determination Theory (SDT), Campbell et al. Model, and Compensatory Model of Emotional Intelligence, Cognitive Intelligence, and Job Performance into a comprehensive model. This integration is supported by both the theoretical foundation and empirical results, making a valuable contribution to the literature. The study finds that work engagement plays a mediator role in the relationship between cognitive, emotional, and social intelligence and job performance.

This study aimed to investigate the impact of cognitive, emotional, and social intelligence, as proposed by the Campbell's Determinants of Job Performance Model (1990), on work engagement and job performance. According to Bandura's (1986) triadic reciprocal determinism, a person's behavior is influenced by their environment, personal factors, and cognitive processes. Bandura (1999) also emphasized that individuals are self-organizing, self-reflecting, self-regulating, and proactive in shaping their behavior. The social cognitive theory's triadic reciprocal postulates that a person's behavior will be shaped by the possible environmental changes and the type of behavior that is stimulated. It was discovered that individuals with higher levels of cognitive, emotional, and social intelligence tend to perform better at work, but their confidence in their abilities also plays a crucial role in their performance. This study contributes to the existing literature by demonstrating the interaction between cognitive, emotional, and social intelligence and their impact on work engagement and job performance.

In addition, the role of work engagement is another theoretical implication. This study proposed that work engagement mediates the relationship between emotional and social intelligence towards job performance. To the researcher's knowledge, this is the very first study that has empirically attempted to focus on the mediation effect of work engagement in the relationship between cognitive, emotional and social intelligence towards job performance in a banking industry in Malaysia.

In the same vein, the findings of the present study also have several implications for policy makers, HR practitioners, managers and also individual employee specifically in banking industry organizations. It is commonly believed that organizations that attract and retain the smartest people will have a competitive advantage, because cognitive intelligence helps workers to process increasingly technical and large amounts of information (Schmidt and

Hunter, 1998, 2000; Michaels et al., 2001). However, according to Karamustafa and Kunday (2018), understanding the importance of emotional and social intelligence in business environment provides an advantage for the organizations as well. Companies that encompass both emotional and social intelligence as part of their culture can effectively use their employee's potential and have wonderful achievements (Njoroge & Yazdanifard, 2014). Moreover, when both emotional and social intelligence are valued, everyone's ideas are respected, teamwork is enhanced (Njoroge & Yazdanifard, 2014). In order to ensure this advantage, HR practitioners could issue cognitive, emotional and social intelligence assessments in selection and thereby exclude candidates who are poorly suited to customer contact jobs (Austin et al., 2004). Using such assessments early in the selection process is advisable, because it prevents unsuitable candidates from going through to the more difficult, expensive stages of the recruitment process (Bateson et al., 2014). Such efficient, inexpensive assessments can help ensure that the selected candidates possess emotional intelligence and are able to perform well in relation to customers and fellow employees, as well as across various performance dimensions. More importantly, talented service counter employees that correctly hired by the organization may result in long-term increase in customer's loyalty; this in turn leads to cost savings by reducing employees turnover. Indirectly, these effects improved bank's profitability and market share (Rashid et al., 2016). Thus, this study allows practitioners to rely on comprehensive framework as a selection criterion.

Moreover, it is the aim of Human Resource Development (HRD) to improve the performance of organization by increasing the productivity of the employees. In this aspect, HRD plays a pivotal role in planning and implementing various trainings and development programs for the improvement job performance (Ismail & Osman-Gani, 2011), in line with evidence that shows that such programmes are effective at increasing both the emotional intelligence and the performance of employees (Kearney et al., 2017). Based on the findings, it is important for banking industry to conduct proper training course on emotional and social intelligence for service counter employees, which can contribute to their work engagement and job performance. Emotional intelligence is found to influence job performance across different service settings (Othman & Muhsin, 2020). Service employees like service counter employees in banking industry should be equipped with the ability to use their emotions effectively to achieve job performance. As service counter employees often must interact with not only customers but also peers who help them process the customer transactions (Kearney et al., 2017). Service counter employees connect their organizations with customers, which emphasizes the importance of both internal and external social relations (Lee and Han, 2020). This is because value in a service encounter is created by satisfied, loyal and productive employees and this directly influences customer satisfaction, where satisfied customers leads to profitability for a service provider (Heskett, et al., 1994). Schultz (2002) further view employees as internal customers, a group who can be analyzed, motivated and educated to deliver higher levels of performance. Therefore, it may be useful for banking industry to revisit their relevant policies and procedures specifically related to human development. Furthermore, businesses can enhance the skills of all employees who contribute to the service experience by providing training, and they can also use their existing employees who possess high emotional and social intelligence as internal coaches. By partnering these emotionally and socially intelligent individuals with less skilled performers, the latter can learn about the nuances of emotional and social intelligence, particularly when dealing with customers. This

approach, as suggested by Kearney et al (2017), can help companies develop a more competent and empathetic workforce.

To attain the aforementioned objective, it is imperative to have a workforce that is actively engaged in their work. Engaged employees are known to remain with an organization for a longer duration, and this contributes to the retention of intellectual capital, leading to a stronger corporate culture (Yongxing et al., 2017). According to research, engagement has a positive correlation with employee performance, meaning that an engaged workforce is likely to carry out their duties more effectively and efficiently (Yongxing et al., 2017). Therefore, organizations can benefit by promoting work engagement among their employees by creating an environment that encourages engagement (Yongxing et al., 2017). Consequently, research on work engagement can add value to the HRD field, whose primary goal is to enhance employee performance by promoting engagement during job performance.

Lastly, it is vital to recognize and appreciate the emotional and social intelligence of service counter employees. Private organizations, such as banks, have recognized the benefits that emotional and social intelligence can bring to work productivity (Vasudevan, 2020).

### **Limitations and Future Research**

The current study has some limitations that could be addressed in future research for better results. Firstly, the study was limited to investigating the relationships between cognitive, emotional and social intelligence towards service counter employee's work engagement in Malaysian local commercial banks. To enhance the study, future research should consider other variables like job satisfaction and personality types as mediators in examining the impact of cognitive, emotional, and social intelligence on employee's job performance. Future studies should also investigate the relationship between employee emotional intelligence and customer emotional intelligence to expand the literature, as suggested by (Kearney et al., 2017). Another area for exploration could be the effectiveness of programming in emotional and social intelligence in improving performance compared to existing programs. Secondly, the study's design was quantitative only due to time constraints, which limits the ability to gain a thorough understanding of the various intelligences of employees. Therefore, future research should consider using both quantitative and qualitative methods, such as interviews, to obtain more comprehensive findings. Thirdly, the exploratory research was conducted in a single country and industry, which raises questions about its generalizability to different cultures and industries. While the study is applicable to the Malaysian banking industry and provides insights into banking industries in other countries with similar cultural perspectives, further research is needed to improve understanding of job performance in other countries with different cultures. Lastly, the study's sample was limited to service counter employees in Malaysian local commercial banks located in Kuala Lumpur and Selangor. To support the findings of this study, future research should include larger sample sizes and a wide range of occupational levels, such as managerial levels, for improved validity generalization. It is highly encouraged to conduct further verification on the findings of this study with a larger sample.

## References

- Acharya, R., & Agrawal, B. (2020). IMPACT OF COVID-19 ON HUMAN RESOURCE POLICY: EMPLOYEE PERSPECTIVE.
- Alzyoud, A. A. Y. (2018a). The Influence of Human Resource Management Practices on Employee Work Engagement. *Foundations of Management*, 10(1), 251–256. <https://doi.org/10.2478/fman-2018-0019>
- Ashfaq, M., Ismail, F., & Irum, S. (2020a). Career management and work behavior in malaysian banking sector perspective. *Euro-pean Journal of Molecular and Clinical Medicine*, 7(3), 116–132.
- Ashfaq, M., Mustapha, I., & Irum, S. (2020). The Impact of Workplace Spirituality on Turnover Intentions in Malaysian Banking Sector. <https://www.thestar.com.my/news/nation/2012/02/19/why-jobhoppers-hop>.
- Amadi, O. T., Sele, D. & Ernest, O. E. (2020). Social Intelligence and Employee Commitment in Bayelsa State Health Sector. *International Journal of Business and Social Science*, 11(2). <https://doi.org/10.30845/ijbss.v11n2p8>
- Atan, J. bin, Mahmood, N. H. N., & Raghavan, S. (2017). The determinant of employee job performance: Incorporating Malaysian SME's Experience on Recruitment.
- Boyatzis, R. E., Gaskin, J., & Wei, H. (2015). Emotional and social intelligence and behavior. In *Handbook of Intelligence: Evolutionary Theory, Historical Perspective, and Current Concepts* (pp. 243–262). Springer New York. [https://doi.org/10.1007/978-1-4939-1562-0\\_17](https://doi.org/10.1007/978-1-4939-1562-0_17)
- Cote, S., & Miners, C. T. H. (2006). 158-Emotional Intelligence,Cognitive Intelligence on job performance.
- Dhliwayo, P., & Coetzee, M. (2020a). Cognitive intelligence, emotional intelligence and personality types as predictors of job performance: exploring a model for personnel selection. *SA Journal of Human Resource Management*, 18, 1–13. <https://doi.org/10.4102/sajhrm.v18i0.1348>
- Dhliwayo, P., & Coetzee, M. (2020b). Cognitive intelligence, emotional intelligence and personality types as predictors of job performance: Exploring a model for personnel selection. <https://doi.org/10.4102/sajhrm>
- Drigas, A., & Papoutsis, C. (2019). Emotional Intelligence as an Important Asset for HR in Organizations: Leaders and Employees. *International Journal of Advanced Corporate Learning (IJAC)*, 12(1), 58. <https://doi.org/10.3991/ijac.v12i1.9637>
- Extremera, N., Mérida-López, S., Sánchez-álvarez, N., & Quintana-Orts, C. (2018a). How does emotional intelligence make one feel better at work? The mediational role of work engagement. *International Journal of Environmental Research and Public Health*, 15(9). <https://doi.org/10.3390/ijerph15091909>
- Eze, B. U., Adelekan, A. S., Ojo, O. J., & Erigbe, P. A. (2019). Emotional Intelligence and Job Performance of Frontline Employees of Selected Microfinance Banks in Lagos, Nigeria. *Management Science Review*, 10(1), 99-106.
- Garg, K., Dar, I. A., & Mishra, M. (2017). Job Satisfaction and Work Engagement: A Study Using Private Sector Bank Managers. *Advances in Developing Human Resources*, 20(1), 58–71. <https://doi.org/10.1177/1523422317742987>
- Garg, N., Jain, A., & Punia, B. K. (2021). Gratitude, social intelligence, and leadership among university teachers: mediation and moderation analysis. *International Journal of Organizational Analysis*, 29(2), 368–388. <https://doi.org/10.1108/IJOA-01-2020-2016>



- Greaves, C. (2019b). EMOTIONAL, SOCIAL AND COGNITIVE INTELLIGENCE Cicely Greaves Independent Research Scholar. IIBM's Journal of Management Research, 4(December 2019), 26–35.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and inter-dependent contexts. *Academy of Management Journal*, 50(2), 327–347. <https://doi.org/10.5465/AMJ.2007.24634438>
- He, J. C., & Cote, S. (2019). Self-insight into emotional and cognitive abilities is not related to higher adjustment. *Nature Human Behaviour*, 3(8), 867–884. <https://doi.org/10.1038/s41562-019-0644-0>
- Husin, H., Yaakub, S., & Malek, M. M. M. A. (2013). Effect of Cultural Intelligence, Emotional Intelligence, Social Intelligence and Islamic Work Ethics on Individual Work Performance. <https://www.researchgate.net/publication/309409209>
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96(1), 72–98. doi:<http://dx.doi.org/10.1037/0033-2909.96.1.72>
- Idris, Adi, K. R., Soetjipto, B. E., & Supriyanto, A. S. (2020). The mediating role of job satisfaction on compensation, work environment, and employee performance: Evidence from Indonesia. *Entrepreneurship and Sustainability Issues*, 8(2), 735–750. [https://doi.org/10.9770/jesi.2020.8.2\(44\)](https://doi.org/10.9770/jesi.2020.8.2(44))
- Jawahar, P. D., & Raghavendra, S. N. (2011). Perceptual Difference of Role based Performance-A Gender Study. In *International Journal of Business* (Vol. 1, Issue 3). [www.ijbhtnet.com](http://www.ijbhtnet.com)
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology*, 92(1), 107–127. <https://doi.org/10.1037/0021-9010.92.1.107>
- Karamustafa, E. Y., & Kunday, O. (2018). The Relationship between Emotional Intelligence and Employee Engagement with The Moderating Role of Gender. *International Journal of Economics, Business and Management Research*, 2(02). [www.ijebmr.com](http://www.ijebmr.com)
- Karthikeyan, V., & Lalwani, S. (2017). Emotional Intelligence in Banking Sector-An Integrative Literature Review. 19, 9–14. <https://doi.org/10.9790/487X-1910060914>
- Kearney, T., Walsh, G., Barnett, W., Gong, T., Schwabe, M., & Ifie, K. (2017). Emotional intelligence in front-line/back-office employee relationships. *Journal of Services Marketing*, 31(2), 185–199. <https://doi.org/10.1108/JSM-09-2016-0339>
- Lai, M.-C., & Chen, Y.-C. (2012). Self-Efficacy, Effort, Job Performance, Job Satisfaction.
- Lathesh, K. R., & Avadhani, V. D. (2018b). A study on social intelligence and its impact on employee performance of insurance sectors in mysuru city. *International Journal of Mechanical Engineering and Technology*, 9(1), 530–537.
- Lee, M. S., & Yoo, J. (2022). The effects of frontline bank employees' social capital on adaptive selling behavior: serial multiple mediation model. *International Journal of Bank Marketing*, 40(2), 197–220. <https://doi.org/10.1108/IJBM-05-2021-0163>
- Lee, M.-S., & Yoo, J. (2021). The effects of frontline bank employees' social capital on adaptive selling behavior: serial multiple mediation model. *International Journal of Bank Marketing*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/ijbm-05-2021-0163>
- Ling, F. C., Singh, J. S. K., & Arumugam, T. (2020). Employee Contextual Performance, Social Intelligence, Spiritual Intelligence: A quantitative Study in Malaysia. *International Journal of Psychosocial Rehabilitation*, 24(02), 968–981. <https://doi.org/10.37200/ijpr/v24i2/pr200404>

- Lopez-Cabarcos, M. A., Vazquez-Rodriguez, P., & Quinoa-Pineiro, L. M. (2021). An approach to employees' job performance through work environmental variables and leadership behaviours. *Journal of Business Research*, 140, 361–369. <https://doi.org/10.1016/j.jbusres.2021.11.006>
- Mishra & Jatav. (2020). ROLE OF EMOTIONAL & SOCIAL INTELLIGENCE ( ESI ) IN WORK SETTINGS. 2349, 215–228.
- Mohamed, E. S. A. (2021b). The impact of social intelligence and employees' collective self-efficacy on service provider's performance in the Egyptian governmental hospitals. *International Journal of Disruptive Innovation in Government*, 1(1), 58–80. <https://doi.org/10.1108/ijdig-07-2020-0003>
- Murtza, M. H., Gill, S. A., Aslam, H. D., & Noor, A. (2020). Intelligence quotient, job satisfaction, and job performance: The moderating role of personality type. *Journal of Public Affairs*, 21(3). <https://doi.org/10.1002/pa.2318>
- Motowidlo, S. J., Borman, W. G., & Schmit, M. J. 1997. A theory of individual differences in task and contextual performance. *Human Performance*, 10(2), 71- 83.
- Motowidlo, S. J., & Van Scotter, J. R. 1994. Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79, 475-480.
- Nafukho, F. F. F. M. (2016). Emotional intelligence research within human resource development scholarship. In *European Journal of Training and Development* (Vol. 40, Issue 2, pp. 90–110). Emerald Group Publishing Ltd. <https://doi.org/10.1108/EJTD-11-2014-0073>
- Nguyen, N. N., Nham, P. T., & Takahashi, Y. (2019a). Relationship between ability-based emotional intelligence, cognitive intelligence, and job performance. *Sustainability* (Switzerland), 11(8). <https://doi.org/10.3390/su11082299>
- Njoroge, C. N., & Yazdanifard, R. (2014a). The Impact of Social and Emotional Intelligence on Employee Motivation in a Multi-generational Workplace The Impact of Social and Emotional Intelligence on Employee Motivation. *Global Journal of Management and Business Research: A Administration and Management Volume*, 14(3), 30–36.
- Omar, K. M., Hussein, N., & Azli, N. (2016). 61 Role Overload, Self-Efficacy, Locus of Control and Job Performance among Employees of a Printing Company in Malaysia. In *Information Management and Business Review* (Vol. 8, Issue 5).
- Othman, A. K., & Syed Muhsin, S. F. H. (2020). The Influence of Emotional Intelligence on Job Performance of Frontline Service Employees: The Moderating Role of Service Types. *Advances in Business Research International Journal*, 6(1), 70. <https://doi.org/10.24191/abrij.v6i1.9943>
- Papoutsis, C., Drigas, A., & Skianis, C. (2019). Emotional Intelligence as an Important Asset for HR in Organizations: Attitudes and Working Variables. *International Journal of Advanced Corporate Learning (IJAC)*, 12(2), 21. <https://doi.org/10.3991/ijac.v12i2.9620>
- Rahim, A., Civelek, I., & Liang, F. H. (2018). A process model of social intelligence and problem-solving style for conflict management. *International Journal of Conflict Management*, 29(4), 487–499. <https://doi.org/10.1108/IJCM-06-2017-0055>
- Rashid, N. M., Sah, N. F. M., Ariffin, N. M., Ghani, W. S. W. A., & Yunus, N. S. N. M. (2016). The Influence of Bank's Frontlines' Personality Traits on Job Performance. *Procedia Economics and Finance*, 37, 65–72. [https://doi.org/10.1016/s2212-5671\(16\)30094-6](https://doi.org/10.1016/s2212-5671(16)30094-6)

- Sabie, O. M., Pirvu, C., Burcea, S. G., & Gatan, M. L. (2020). The Relationship between Emotional Intelligence and Human Resources Employee Performance: A Case Study for Romanian Companies. *Management Research and Practice*, 13(3), 45.
- Sonnentag, S., & Frese, M. (2002). *Psychological management of individual performance, Performance Concepts and Performance Theory*. Wiley.
- Sulistyo, A. R., & Suhartini. (2019). The Role of Work Engagement in Moderating the Impact of Job Characteristics, Perceived Organization-al Support, and Self-Efficacy on Job Satisfaction.
- Supramaniam, S., & Singaravelloo, K. (2020). Emotional Intelligence, Job Satisfaction and Organisational Performance in the Ma-laysian Public Administration. In *Institutions and Economies* (Vol. 12, Issue 1).
- Supramaniam, S., & Singaravelloo, K. (2021). Impact of emotional intelligence on organisational performance: an analysis in the Malaysian public administration. *Administrative Sciences*, 11(3). <https://doi.org/10.3390/ADMSCI11030076>
- Tepayakul, R., & Rinthaisong, I. (2018a). Job satisfaction and employee engagement among human resources staff of Thai Private Higher Education Institutions. *Journal of Behavioral Science*, 13(2), 68–81.
- Tisu, L., Lupsa, D., Virga, D., & Rusu, A. (2020). Personality characteristics, job performance and mental health the mediating role of work engagement. *Personality and Individual Differences*, 153. <https://doi.org/10.1016/j.paid.2019.109644>
- Vasudevan, L. (2020). *Emotional Intelligence in The Context of Malaysian Banking Industry: Theory and Method Application*.
- Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based meas-ure. *Academy of Management Journal*, 41(5), 540–555. <https://doi.org/10.2307/256941>
- Yongxing, G., Hongfei, D., Baoguo, X., & Lei, M. (2017). Work engagement and job performance: The moderating role of perceived organizational support. *Anales de Psicologia*, 33(3), 708–713. <https://doi.org/10.6018/analesps.33.3.238571>
- Zahra, M., & Kee H., M. (2019). Predictors of Job Performance: Emotional Intelligence, Psychological Capital and Proactive Personality. *International Journal of Recent Technology and Engineering*, 8(3S2), 440–447. <https://doi.org/10.35940/ijrte.c1085.1083s219>