The Influence of Psychological Capital towards Work Engagement among Women Employee in Johor Bahru Corporate Companies

Yuhanis Khalida A Rashid[1*]
Fatin Amrina A Rashid[2]
Ana Haziqah A Rashid[3]
Nor Akmar Nordin[4]

[1]*Department of Social Science,*
Faculty of Education and Social Sciences
Universiti Selangor

[2]*Department of Mechanical and Manufacturing Engineering,*
Faculty of Engineering and Built Environment
Universiti Kebangsaan Malaysia

[3, 4]*School of Human Resource Development and Psychology,*
Faculty of Social Science and Humanities
Universiti Teknologi Malaysia

[*]Corresponding e-mail: [yuhanis@unisel.edu.my]

This study investigated how psychological capital influences work engagement among women employees in a corporate company. Data was collected using a self-assessment questionnaire from 102 women employees from two corporate companies in Johor Bahru district. The data were analyzed using the partial least squares structural equation modeling technique in SMARTPLS 3.2 software. Convergent and discriminant validity of the latent constructs were validated in this study. Overall, psychological capital has a moderate influence on work engagement among women employees in this corporate company, with R2 = 0.414. The structural model results revealed that resilience has a significant influence on work engagement. Findings show that resilience among women employees makes them more engaged with their work compared to self-efficacy, optimism and hope. Future studies should explore the difference between the influence of psychological capital between women and men towards their work engagement.

Keywords: Psychological Capital, PsyCap, Work Engagement, Gender, Corporate Company

Being energetic and highly motivated in an organisation is vital in contributing to effective work. Most organisations require workers who are psychologically linked to their job and eager and able to immerse themselves in their work responsibilities to happen successfully. Besides, the employees also need to be proactive and committed to high-quality performance standards. Therefore, the organisation needs the employees engaged with their work (Bakker & Leiter, 2010). An employee with good work engagement will have a high level of energy, be enthusiastic about their work, and deal well with the their likelihood to commit counterproductive work behaviors.

The present paper extended research by breaking down psychopathic personality

demands of their jobs (Bakker & Demerouti, 2008).

We can measure human resource strength and psychological capacities in today's workplace based on the psychological capital component. It can also be developed and effectively managed for performance improvement. This is the concept of positive organisational behaviour that is the basis of psychological capital (Luthans & Youssef, 2004). Luthans et al., (2007) defined psychological capital as an indivdual's motivational propensities and positive psychological state of development. Psychological capital has four dimensions: self-efficacy, optimism, hope, and resiliency. According to Sweetman and Luthans, (2010), the four dimensions of psychological capital are positive resources for individual processes across situations and enable a company's flourishing success. The new psychological capital approach is to gain a competitive advantage in the organisation from their human resources (Luthans et al., 2007).

To stay ahead of the competition, today's organisations require higher production and efficiency. However, without work engagement, they will be unable to keep their organisation on top. The issue of work engagement has not been given serious attention to employees. Furthermore, while the organisation invests more in training to boost efficiency, there is no investment in training to increase employee work engagement. Moreover, a company is under high pressure to perform and be profitable, and one of the obstacles is properly managing a workforce to obtain a competitive edge (Gumilang & Indrayanti, 2022; Harris, 2012). This problem arises because today's businesses are more concerned with production and profit than employee engagement. If they have a lower level of productivity, they will tend to raise it while ignoring employee engagement. As a result, additional research is needed to demonstrate the importance of work engagement in an organisation.

In addition, the researchers discovered that previous psychological capital and work engagement research has primarily been undertaken in the healthcare and education sectors. There are only a few previous studies that have been done in the corporate sector. The corporate sector is receiving increasing attention in today's organisations because it has linked with economic performance. Hence, to maintain their reputation, it is necessary to have human capital that always engages with their work to improve company performance (Schaufeli & Bakker, 2010). Meanwhile, Tabaziba, (2015) conducted a study in the corporate sector among white-collar workers in South Africa and Zimbabwe. Thus, to identify the relationship between psychological capital and work engagement, this study has been conducted in the corporate sector and focused on organisation context among employees.

At the same time, most psychological capital studies have been conducted in Western culture. Thus, it is hard to generalise the findings to Asian culture because, according to Hofstede's study, most of the cultures in Asia are based on collectivism, whereas western culture is more individualistic (Matsumoto & Juang, 2012). The findings of psychological capital are more individualistic such as reports by Boamah and Laschinger (2015); Herbert (2011); Luthans et al. (2008); Nigah et al. (2012); Simons and Buitendach (2013). Therefore, this study aimed to be implemented in Malaysian culture, which is why the researcher had conducted this study at two corporate companies. Furthermore, these two companies are the organisations that Bumiputra fully monopolised.

Besides that, there is also a lack of study investigating the influence of psychological capital, specifically on women employees. A study by Eman-Nafa and Ishak (2016) demonstrates that psychological capital influences work engagement among women employees. However, Eman-Nafa

& Ishak (2016) conducted a study among female teachers in Saudi Arabia, focusing more on female employees under the government sector. There is still a lack of study that focuses on women employees in the corporate sector since this sector is very demanding, especially on working commitment. Therefore, there is a need to investigate further on this matter. Through this study, the authorities could consider the result of this study, and further action could be taken to increase work engagement among employees in these two corporate companies.

Literature Review

Psychological Capital

Psychological capital is one of the newest research areas of interest in organisational behaviour and human resources. Psychological capital is introduced by Luthans et al., (2004). The notion of psychological capital is derived by Luthans et al., (2007) from psychological resources theory, including core resource theories and multi-component resource theories. Based on key resources, Luthans et al., (2007) have developed dimensions for psychological capital, namely self-efficacy, optimism, and hope. Meanwhile, multi-component resource theories emphasise optimism and resiliency (Luthans et al., 2007). Figure 1 demonstrates the model of psychological capital intervention (PCI).

Self-Efficacy

The psychological capital of self-efficacy can be defined as believing in one's ability to mobilise the motivation, cognitive resources and course of action to obtain a specific outcome (Luthans & Youssef, 2004). Self-efficacy in the study is referred to as an employee's conviction or confidence about his or her abilities to mobilise the motivation, cognitive resources and courses of action needed to execute a specific task given successfully. In other words, efficacy will increase an employee's motivation to face any obstacles and support completing a challenging task.

Optimism

Optimism encourages people to take credit for good things that happen in their life, which boosts their self-esteem and morale. Optimism is defined in this study as a valuable lesson in self-discipline, analysis of the past event, contingency preparation, and preventive care (Luthans et al., 2007). Optimism refers to an employee's confidence that she or he will succeed now and in the future. That means optimism is an internal motivation or disposition of an employee to expect a constructive outcome for the future.

Hope

Hope is a sense of agency and expectations that empowers people with the internalised resolve and willpower to expend the energy necessary to attain their objectives (Cavus & Gokcen, 2015). In this study, hope is described as an employee's positive motivational state that is persevering toward goals and redirecting paths to achieve the goals to be successful. In other words, hope refers to the employee's feeling of expectation and desire for a positive thing that will happen by implementing obstacle planning.

Resilience

Individuals' ability to cope well in considerable change, adversity, risk, or setbacks is referred to as resilience in psychological capital (Luthans, 2002). In this research, resilience is defined as an employee's positive psychological capacity to recover, bounce back from adversity, and cope with distress in this study. Resiliency is a psychological capacity that aids in retrying and overcoming failures when a person is confronted with failures, whether

uncontrollable external or internal factors cause them.

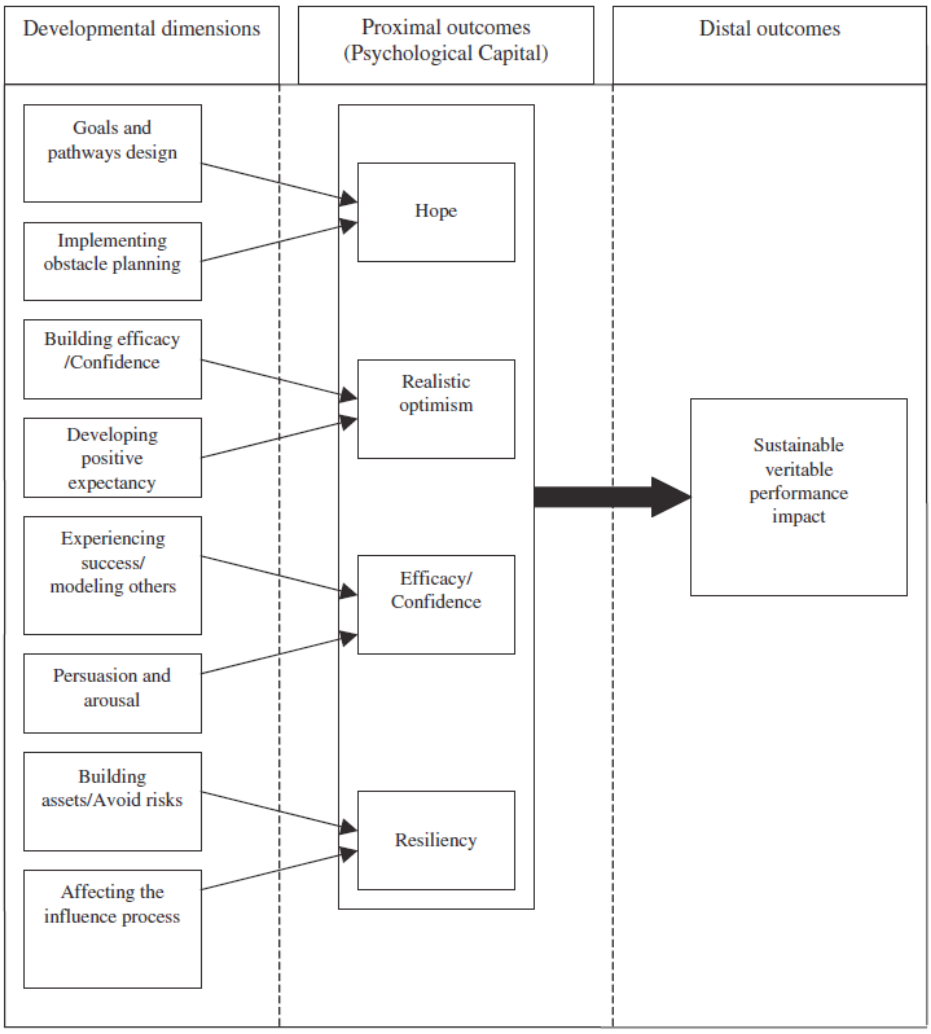

Figure 1. Psychological Capital Intervention (PCI) (Luthans et al., 2007)

Work engagement

Work engagement is based on the JD-R model proposed by Bakker & Demerouti (Bakker & Demerouti, 2008). Two assumptions have been drawn in this model. Firstly, job resources play a role in starting a motivation process that leads to work engagement, and as a result, it will lead to higher performance and achieving the work goal. The second assumption is, job resources become salient and gain their motivational potential when employees are confronted with high job demands such as emotional and mental demands. The relationship between job resources and job demands will improve work engagement toward achieving work goals. Therefore, work engagement is defined as a positive, fulfilling and work-related state of mind characterised by vigour, dedication and absorption (Schaufeli et al., 2002).

Vigour

Vigour is an individual's possession of physical strength, emotional energy, and cognitive liveliness that contribute to a set of interrelated affective states experienced at work (Shirom, 2010). In this study,

Figure 1. The Conceptual Model. vigour refers to employees' high energy and mental resilience while working. People with a high level of vigour are usually persistent in the face of difficulties, not being fatigued and willing to invest energy into the work.

Dedication

According to Schaufeli and Bakker (2003), dedication is being deeply invested in an employee's work and feeling passionate and proud of their job. Employees are also being inspired, and challenged by their dedication and having a sense of significance toward their work.

Absorption

Absorption refers to the state of mind with intense concentration and focus on one's tasks at one time (Schaufeli & Bakker, 2003). When a person is absorbed in their work, it is difficult to detach themselves from it, and time flies fast. Employees tend to ignore everything else that is going on around them while they are working.

Previous Study

Numerous previous studies have been conducted to identify the influence of psychological capital and work engagement in different contexts. Most studies have discovered that psychological capital and work engagement have a significant positive relationship (Nugroho et al., 2013; Simons & Buitendach, 2013). A study by Alessandri et al. (2018) shows that psychological capital has a significant positive relationship with work engagement among employees. Besides, Gustitia (2019) researched the impact of psychological capital on work engagement in 82 individuals from different organisations and found a significant positive relationship between both variables. Du Plessis and Boshoff (2018);Joo et al. (2016); Nordin et al. (2019); Robyn and Mitonga-Monga (2017) all confirmed this research.

Other than that, several researchers found that the relationship between psychological capital and work engagement is inconsistent. A study conducted by Karatepe and Karadas (2015) revealed a positive correlation between self-efficacy and work engagement among employees in the hotel industry in Romania. Meanwhile, the other aspects of psychological capital (hope, resiliency, and optimism) do not significantly relate to job satisfaction. On the other hand, Erbasi and Ozbek, (2017) have studied the effect of psychological capital on work engagement among employees in Turkey. The finding shows that three components of psychological capital, hope, resilience, and optimism, significantly predict work engagement. The influence of psychological capital on work engagement shows that only self-efficacy has no statistically significant effects on work engagement.

Meanwhile, a study by Wang et al. (2017) shows that two components of psychological capital, hope and optimism, were positively associated with all components of work engagement (vigour, dedication and absorption). Contrarily, the other two components of psychological capital, self-efficacy and resilience, have not significantly affected work engagement. Generally, it is shown that previous study has different findings between psychological capital and work engagement.

Hypothesis 6

A significant difference was found between men and women regarding the effect of CAPP-Self on CWB, specifically on Theft, The inconsistencies between psychological capital and work engagement can be attributed to various contextual factors, such as cultural differences and different industry-specific pressures. Cultural differences play a significant role in shaping how psychological capital influences work engagement (Yao et al., 2022). In collectivist cultures, group harmony and collective success may overshadow individual psychological attributes affecting workplace work engagement (George et al., 2022; Yao et al., 2022). In contrast, personal achievement is highly valued in individualistic cultures. Therefore, psychological capital may have a more pronounced effect on work engagement, as individuals are more likely to attach their strengths to enhance their work performance (Alwan & Andriani, 2023). The differences highlight the need for cultural context approaches when exploring the relationship between psychological capital and work engagement.

The industry-specific pressure also can contribute to the inconsistencies between psychological capital and work engagement. A high-stress environment can diminish the positive effects of psychological capital on work engagement due to overwhelming job demands and burnout, especially in a healthcare setting (Pan et al., 2017; Peng et al., 2013). In such setting, an individual with high psychological capital may struggle to maintain work engagement levels because the external pressures can negate their internal resource (Gao et al., 2023). Meanwhile, in industries characterized by supportive work environments, such as technology, corporate, or creative sectors, psychological capital may significantly enhance work engagement, as employees feel empowered to utilize their strengths in a conducive atmosphere (Gozali et al., 2024; Gumilang & Indrayanti, 2022).

Besides, Xu et al., (2017) state that when employees perceive high levels of support from their organization, the positive relationship between psychological capital and work engagement is strengthened. This shows that in organizational context such as leadership styles and support mechanisms can facilitate the effectiveness of psychological capital in promoting work engagement. In addition, psychological capital elements such as resilience and optimism positively influence work engagement across genders. A study by Tamar and Wirawan, (2020) shows that psychological capital and work engagement are influenced differently in male and female employees depending on the type of job. Besides, the impact of a strong professional identity and high psychological capital on work engagement show that female employees have high resilience and improved dedication (Sun et al., 2022).

Therefore, based on these rationales, there are four hypotheses developed in this study:

H1: Self-efficacy is positively related to WE

H2: Optimism is positively related to WE

H3: Hope is positively related to WE

H4: Resilience is positively related to WE

Methodology

Participants

This study implemented a survey research design to collect data from women employees in two corporate companies in Johor, Malaysia. In determining the sample size for this study, a sampling table Cohen, (2013) referred to, stated that 51 observations are needed to detect total variance explained (R2) around 0.50, assuming a significant level of 5% and statistical power of 80%. This suggests that 51 responses from participants are sufficient to explain the variance in the dependent variable. The data collection was conducted two times at different organizations. Based on the information given by the company, there were a total of 160 women employees in both corporate companies. Both companies were monopolies by Bumiputra. Bumiputra is a Malaysian concept that is used to refer to indigenous peoples of the country (Ismail, 2003). It includes Malays, the Orang Asli of Peninsular Malaysia and indigenous groups from East Malaysia (Sabah and Sarawak).

According to Krejcie & Morgan (1970), we have collected 112 respondents to represent the population of this study. The distribution and collection of the completed questionnaires took about one month. Out of 112 responses collected, only 102 of them can be used to be analyzed.

Instruments

The instrument used in this study was adopted from two established questionnaires by (Luthans et al. 2007) and Schaufeli and Bakker (2003). Luthans et al. (2007) have developed the PsyCap Questionnaire (PCQ) to assess psychological capital. The PCQ consists of 24 items and is a self-report questionnaire. A total of 19 items were chosen for this study. Five items from the original questionnaire have been removed from this study due to low factor loading value. Five items of self-efficacy, six items of optimism, four items of hope, and four items of resilience make up this questionnaire's four subscales. All responses were recorded on a six-point Likert scale, ranging from 1= strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 =somewhat agree, 5 = agree and 6 = strongly agree.

On top of that, the 17 items of the Utrecht WE Scale (UWES) were used to assess work engagement (Schaufeli & Bakker, 2003). One item from the original questionnaire was eliminated. Thus, in this study, UWES consists of three underlying dimensions: vigour (six items), dedication (four items), and absorption (six items). All items were measured on a seven-point Likert scale ranging from 1 = 'never' to 7 = 'always.

In this study, SPSS version 22 was used for the analysis. Means, standard deviations, and percentages were determined for the descriptive analysis. In addition, a partial least square structural equation modeling technique using SMART PLS 3.2 software was used to identify the influence of psychological capital towards work engagement among women employees.

Results

Demographics information

This study's respondents were employees aged around 20 to 50 years and above in terms of demographics. The highest percentage of the age group is 21 to 30 years old, which is 37.3 % by having 38 respondents and followed by 30 respondents who are 29.4% categorised in 31 to 40 years old. All respondents in this study were 100% occupied by Malays because these two companies are fully monopolised by indigenous. The findings show that 55.9% of respondents were in non-executive positions, whereas only 44.1% were executive.

The majority of the respondent has been in the current position for 1 to 5 years (38.2%). Following that, 21 respondents have been in their current post for 6 to 15 years (23%), followed by 18 respondents who have been in their current position for less than one year. Table 1 shows that 15 respondents (16.7%) have been in their current post for 16 to 25 years, whereas just nine respondents have been in it for more than 25 years (8.8 %). As for the type of employment, 90 of 102 respondents were permanent employees, and 12 respondents claimed they are contact employees.

Table 1
Demographic Information

Demographic Information (n = 102)		Frequency (*f*)	Percentage (%)
Age	< 20	2	2
	21 – 30	38	37.3
	31 – 40	30	29.4
	41 – 50	24	23.5
	> 50	8	7.8
Position	Executive	45	44.1
	Non - Executive	57	55.9
Working	<1 Year	18	17.6
Experience	1 – 5 Year	39	38.2
	6 – 15 Year	21	20.6
	16 – 25 Year	15	14.7
	>25 Year	9	8.8
Type of	Permanent	90	88.2
Employment	Contract	12	11.8

Structural Equation Modelling

A measurement model was developed to explore the relationship between psychological capital and work engagement. Firstly, the model formulated needs to be validated to ensure the accuracy of the findings. This study adopted convergent validity using factor loadings and average variance extracted (AVE) because all measures were reflective. We also provided composite reliability (CR) scores to measure the internal consistency of the scales. In determining the convergence validity of the measurement model, factor loadings, CR and AVE were observed. CR is a more accurate measure of reliability than Cronbach's Alpha since its calculation is based on differential weights of the indicators and is frequently used in conjunction with SEM analysis (Dijkstra & Henseler, 2015; Sarwar et al., 2020).

The PLS algorithm was used to analyse the measurement model indicated that the item loading was ranged from 0.485 to 0.883, as shown in Table 2. In the analysis, the minimum factor

loading for work engagement was 0.485, which is slightly below the recommended threshold of 0.50. However, according to guidelines provided by (Hair Jr et al., 2014), factor loadings above 0.40 can be considered acceptable if other indicators of construct validity, such as AVE and CR, meet the required thresholds. In this study, AVE values ranged from 0.524 to 0.678, exceeding the lower cut-off of 0.50, while CR values ranged from 0.813 to 0.953, surpassing the minimum threshold of 0.70 (see Table 1 for details). These values demonstrate that, despite the slightly lower factor loading, the constructs exhibit adequate convergent validity and internal consistency reliability. For this model, several items are deleted (B1a; B3a; B3b; B4b; B4e; C2c) to increase the AVE values to the threshold (Fornell & Larcker, 1981; Hair Jr et al., 2021).

Table 2
Convergent Validity: Indicator Loadings, CR and AVEs.

Construct	Indicator	Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)
Self- Efficacy	B1b	0.808	0.893	0.678
	B1c	0.674		
	B1d	0.790		
	B1e	0.699		
	B1f	0.801		
Optimism	B2a	0.690	0.891	0.577
	B2b	0.760		
	B2c	0.741		
	B2d	0.724		
	B2e	0.856		
	B2f	0.778		
Hope	B3c	0.693	0.813	0.524
	B3d	0.865		
	B3e	0.837		
	B3f	0.883		
Resilience	B4a	0.763	0.869	0.572
	B4c	0.753		
	B4d	0.573		
	B4f	0.787		
Work Engagement	C1a	0.819	0.953	0.561
	C1b	0.804		
	C1c	0.748		
	C1d	0.711		
	C1e	0.800		
	C1f	0.623		
	C2a	0.827		
	C2b	0.834		
	C2d	0.811		
	C2e	0.667		
	C3a	0.612		
	C3b	0.485		

C3c	0.835
C3d	0.730
C3e	0.850
C3f	0.723

In addition, Table 3 shows the heterotrait-monotrait (HTMT) ratio of correlation values, and all values among the research variable were below 0.90 (Henseler et al., 2015). Hence, from the findings, it can be concluded that there is adequate disparity among the constructs.

Table 3
Discriminant Validity

	Hope	Optimism	Resilience	Self-Efficacy	Work Engagement
Hope					
Optimism	0.807				
Resilience	0.589	0.661			
Self-Efficacy	0.618	0.876	0.615		
Work Engagement	0.508	0.610	0.645	0.571	

However, it is recognized that lower factor loadings may still introduce some limitations to the interpretability of specific indicators. Further analysis was conducted to assess whether these lower loadings had a significant impact on the overall model fit or explanatory power. The proposed measurement model's R^2 value for work engagement was 0.414, indicating that 41.4% of the variance in work engagement can be explained by self-efficacy, optimism, hope, and resilience (see Figure 2), supporting the robustness of the constructs in capturing the underlying latent variables.

The f^2 effect size value for resilience on work engagement was 0.096, indicating a small effect, as per (Michael Borenstein & Cohen, 1988) guidelines. Although this is considered a small effect, it still provides meaningful insight into the relationship between resilience and work engagement within the context of the model.

Additionally, the model demonstrated an acceptable level of predictive relevance, with a Q^2 value of 0.217. This Q^2 value suggests that the model has adequate predictive capability, further supporting the robustness of the structural model despite the small effect size of resilience on work engagement.

The hypothesis in this study was analysed through bootstrapping techniques with 5000 samples. As shown in Table 4, the findings show that only resilience ($\beta = 0.289,\ p < 0.05$) has a significant relationship with work engagement with a P-value of 0.004. Self-efficacy, optimism and hope are proven to be insignificant towards work engagement. This suggests that self-efficacy, optimism, and hope in female employees' work engagement might be shaped by other factors, such as organizational culture or work-life balance. For instance, research by Zahra et al. (2022) found that hope had a relatively minor influence on work engagement among

employees. In the long run, after analysing the data collected, only H_4 is proven to be significant. Hence, H_4 is accepted. In contrast, the hypothesis for H_1, H_2 and H_3 is rejected. Given these points, it is concluded that resilience significantly influences work engagement at $p < 0.05$.

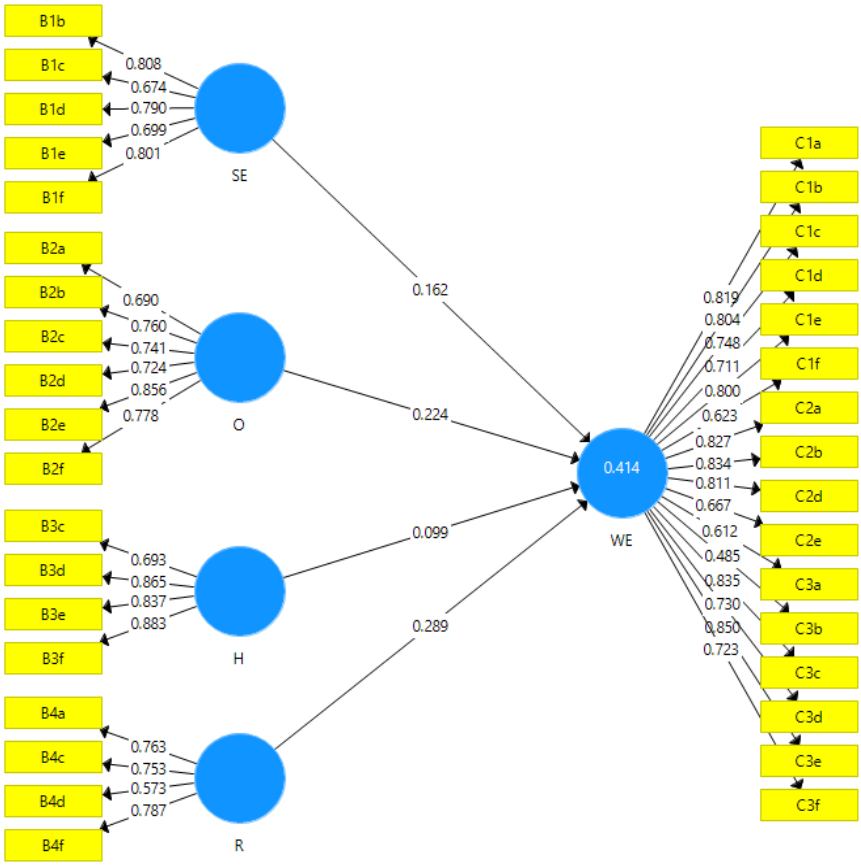

Figure 2. The measurement model of Psychological Capital on Work Engagement.

Table 4

Bootstrap findings

	Path Coefficients	T Statistics	P Values
Self Efficacy -> Work Engagement	0.162	1.333	0.183
Optimism -> Work Engagement	0.224	1.485	0.138
Hope -> Work Engagement	0.099	0.953	0.341
Resilience -> Work Engagement	0.289	2.864	0.004*

Notes. * $p < .05$.

Discussion

The demographic data in this study demonstrate that most of the respondents are Malay in the range of age of 21 to 30 years old and have permanent positions in that corporate company. On top of that, most respondents also have served 1 to 5 years throughout their service in the

corporate company. Correspondingly, this study represented women with a secure job position in the young and energetic age.

Psychological capital serves as one important psychological component in individuals that helps them connect with their work. Since psychological capital has several components, there were questions on which influences an individual towards their work engagement, especially women employees. Findings from this study have proven that among those components, resilience has influenced women employees on their work engagement.

However, self-efficacy, hope and optimism do not significantly influence work engagement among women employees in a corporate sector.

Based on the results, cultural values and norms can influence the perceived importance and expression of psychological resources especially in resilience. In certain cultures, resilience may be more strongly emphasized as a critical coping mechanism compared to individual traits like optimism or self-efficacy. It can be show in Asian cultures, resilience closely associated with community support and collective endurance (González-Navarro et al., 2019). Therefore, it could be result in a stronger relationship between resilience and work engagement especially among women. Meanwhile, self-efficacy and optimism focus more on individual resource and may not resonate as strongly within this context.

Resilience can be valuable in high level of uncertainty environment or stress, where the ability to recover from setback is crucial for maintaining engagement. In this study, it shows that women employee can face any challenge in their workplace. Thus, self-efficacy, optimism and hope may not directly contribute to work engagement because their effects could be overshadowed by the necessity for resilience.

The small effect size of resilience (f^2 = 0.096) indicates that, while statistically significant, its impact on work engagement is modest. This shows that resilience alone may not fully account for variations in work engagement. Therefore, there are need for future research to incorporate additional variables or explore interactions between psychological capital to provide a more comprehensive understanding of what drives engagement.

In reference to the previous study, there were inconsistent results on the relationship between psychological capital elements and work engagement. However, Othman and Nasurdin (2011) study prove that resilience has a significant relationship with work engagement, especially among Malaysian employees. The respondent for the study by Othman and Nasurdin (2011) also aligns with this study's respondents since 99% of their respondents are represented by women. On the contrary, the hope component in this study did not significantly relate to work engagement, as stated by Othman and Nasurdin (2011). This result shows that Malaysian women employees have a high level of resilience towards their work. They can find positive meaning in unpleasant situations and control their negative emotions related to their work (Van Wingerden & Poell, 2019). For this reason, those women employees can easily cope and adapt when they face risky and challenging conditions related to their work. Hence, this could influence their work engagement when they can manage their work environment successfully.

In contrast, several studies have also revealed that self-efficacy, hope, and optimism have no significant effects on work engagement. Erbasi and Ozbek (2017) have proved that self-efficacy does not predict an individual work engagement. However, these results contradict the finding by Karatepe and Karadas, (2015). This situation is also replicate the hope and optimism component in psychological

capital. A previous study by Wang et al. (2017) has shown a contradicting result from this study's findings. This is because they discovered that hope and optimism affected employee work engagement. Since psychological capital is a relatively new scope in industrial psychology, more research should explore its relations with work engagement. Further and larger studies are needed to explore more in this area, especially women employees. Large sample size can help get more consistent results and a robust model representing a larger population.

Limitation and Future Research

Potential reasons for the slightly lower factor loading were considered to further address this issue, such as the complexity inherent in the work engagement construct or possible measurement error. Future studies could benefit from refining the measurement items or using larger sample sizes to enhance factor loadings across all items. While this study's focus on Malay women provides valuable, group-specific insights, it also underscores opportunities for future research with a more diverse sample of women employees in a region to broaden the applicability of these findings.

Acknowledgement

The first and fourth author was the content experts in this study. The first author was the main author of this article. In contrast, the second and third authors contribute to data collection and analysis. The fourth author supervises the whole research conduct. All authors wrote the whole article together according to each subtopic and expertise.

References

Alessandri, G., Consiglio, C., Luthans, F., & Borgogni, L. (2018). Testing a dynamic model of the impact of psychological capital on work engagement and job performance. Career Development International. https://doi.org/10.1108/CDI-11-2016-0210

Alwan, Z., & Andriani, C. (2023). Authentic Leadership on Work Engagement with Psychological Capital as a Mediating Variable. Human Resource Management Studies, 3(4). https://doi.org/10.24036/hrms.v3i4.306

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. Career Development International, 13(3), 209–223. https://doi.org/10.1108/13620430810870476

Bakker, A. B., & Leiter, M. P. (2010). Work engagement: A handbook of essential theory and research. In Work Engagement: A Handbook of Essential Theory and Research. Psychology Press. https://doi.org/10.4324/9780203853047

Boamah, S., & Laschinger, H. (2015). Engaging new nurses: The role of psychological capital and workplace empowerment. Journal of Research in Nursing, 20(4), 265–277. https://doi.org/10.1177/1744987114527301

Cavus, M. F., & Gokcen, A. (2015). Psychological capital: Definition, components and effects. Journal of Education, Society and Behavioural Science, 244–255. https://doi.org/10.9734/BJESBS/2015/12574

Cohen, J. (2013). Statistical power analysis for the behavioral sciences. Routledge.

Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. MIS Quarterly, 39(2), 297–316.

Du Plessis, M., & Boshoff, A. B. (2018). The role of psychological capital in the

relationship between authentic leadership and work engagement. SA Journal of Human Resource Management, 16(1), 1–9. https://doi.org/10.4102/sajhrm.v16i0.1007

Eman-Nafa, A., & Ishak, N. A. (2016). Saudi Arabia women teachers' psychological capital towards work engagement. Journal of International Business, Economics and Entrepreneurship, 1(1), 39–45. https://doi.org/10.24191/jibe.v1i1.14468

Erbasi, A., & Ozbek, M. C. (2017). The effect of psychological capital on work engagement. Australian Academy of Business and Economics Review, 2(4), 276–284.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. Sage Publications Sage CA: Los Angeles, CA.

Gao, Y., Yue, Y., & Li, X. (2023). The relationship between psychological capital and work engagement of kindergarten teachers: A latent profile analysis. Frontiers in Psychology, 14. https://doi.org/10.3389/fpsyg.2023.1084836

George, O. J., Okon, S. E., & Akaighe, G. (2022). Emotional intelligence and work engagement: a serial mediation model. Journal of Organizational Effectiveness: People and Performance, 9(2), 193–211. https://doi.org/10.1108/JOEPP-02-2021-0025

González-Navarro, P., Talavera-Escribano, E., Zurriaga-Lloréns, R., & Llinares-Insa, L. I. (2019). Culture, work, and subjective well-being: The role of LMX and resilience in Spanish and Chinese cultures. International Journal of Environmental Research and Public Health, 16(24), 4945. https://doi.org/10.3390/ijerph16244945

Gozali, V., Zamralita, & Lie, D. (2024). Workplace Wellbeing and Work Engagement among Generation Z Employees in PT X: The Role of Psychological Capital as a Moderator. Biopsikososial: Jurnal Ilmiah Psikologi Fakultas Psikologi Universitas Mercubuana Jakarta, 8, 50. https://doi.org/10.22441/biopsikososial.v8i1.23750

Gumilang, N. A., & Indrayanti, I. (2022). Work engagement among millennial employees: The role of psychological capital and perceived organizational support. Humanitas: Indonesian Psychological Journal, 87–100. https://doi.org/10.26555/humanitas.v19i2.45

Gustitia, A. A. (2019). The effect of psychological capital on work engagement with job crafting as a mediator variable among generation y employees. Russian Journal of Agricultural and Socio-Economic Sciences, 91(7). https://doi.org/10.18551/rjoas.2019-07.38

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM). Sage publications.

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. European Business Review, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Harris, C. (2012). Relationships Between Psychological Capital, Work Engagement and Organisational Citizenship Behaviour in South African Automotive Dealerships. Neslson Mandela Metropolitan University.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Herbert, M. (2011). An exploration of the relationships between psychological capital

(hope, optimism, self-efficacy, resilience), occupational stress, burnout and employee engagement. Stellenbosch: Stellenbosch University. http://hdl.handle.net/10019.1/17829

Ismail, A. R. H. (2003). Bumiputera, Malays and Islam: a historical overview. Kajian Malaysia, 21(1), 105–122.

Joo, B.-K., Lim, D. H., & Kim, S. (2016). Enhancing work engagement: The roles of psychological capital, authentic leadership, and work empowerment. Leadership & Organization Development Journal. https://doi.org/10.1108/LODJ-01-2015-0005

Karatepe, O. M., & Karadas, G. (2015). Do psychological capital and work engagement foster frontline employees' satisfaction? A study in the hotel industry. International Journal of Contemporary Hospitality Management. https://doi.org/10.1108/IJCHM-01-2014-0028

Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607–610.

Luthans, F. (2002). The need for and meaning of positive organizational behavior. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 23(6), 695–706. https://doi.org/10.1002/job.165

Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. Business Horizons, 47(1), 45–50. https://doi.org/10.1016/j.bushor.2003.11.007

Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—employee performance relationship. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 29(2), 219–238. https://doi.org/10.1002/job.507

Luthans, F., & Youssef, C. M. (2004). Human, Social, and Now Positive Psychological Capital Management: Investing in people for competitive advantage. Organizational Dynamics, 33(2), 143–160. https://doi.org/10.1016/j.orgdyn.2004.01.003

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: Developing the human competitive edge (Vol. 198). Oxford University Press Oxford.

Matsumoto, D., & Juang, L. (2012). Culture and psychology: Cengage Learning. Inc. 5th Edition, United States.

Michael Borenstein, D., & Cohen, J. (1988). Statistical Power Analysis: A Computer Program. Taylor & Francis.

Nigah, N., Davis, A. J., & Hurrell, S. A. (2012). The impact of buddying on psychological capital and work engagement: An empirical study of socialization in the professional services sector. Thunderbird International Business Review, 54(6), 891–905. https://doi.org/10.1002/tie.21510

Nordin, N. A., Rashid, Y. K. A., Panatik, S. A., & Rashid, A. H. A. (2019). Relationship between psychological capital and work engagement. Journal of Research in Psychology, 1(4), 6–12. https://doi.org/10.31580/jrp.v1i4.1115

Nugroho, D. A. S., Mujiashi, E., & Prihatsanti, U. (2013). Hubungan Antara Psychological Capital Dengan Work Engagement Pada Karyawan Pt. Bank Mega Regional Area Semarang. Jurnal Psikologi Undip, 12(2), 192–202. https://doi.org/10.14710/jpu.12.2.192-202

Othman, N., & Nasurdin, A. M. (2011). Work engagement of Malaysian nurses: Exploring the impact of hope and

resilience. World Academy of Science, Engineering and Technology, 5(12), 391–395. https://doi.org/10.5281/zenodo.1334395

Pan, X., Mao, T., Zhang, J., Wang, J., & Su, P. (2017). Psychological capital mediates the association between nurses' practice environment and work engagement among Chinese male nurses. International Journal of Nursing Sciences, 4(4), 378–383. https://doi.org/10.1016/j.ijnss.2017.09.009

Peng, J., Jiang, X., Zhang, J., Xiao, R., Song, Y., Feng, X., Zhang, Y., & Miao, D. (2013). The impact of psychological capital on job burnout of Chinese nurses: the mediator role of organizational commitment. PloS One, 8(12), e84193. https://doi.org/10.1371/journal.pone.0084193

Robyn, C. M., & Mitonga-Monga, J. (2017). Psychological capital and work engagement in relation to employee commitment in a South African manufacturing organisation. Journal of Contemporary Management, 14(1), 702–730. https://hdl.handle.net/10520/EJC-a1c5fddd0

Sarwar, F., Panatik, S. A., & Jameel, H. T. (2020). Does fear of terrorism influence psychological adjustment of academic sojourners in Pakistan? Role of state negative affect and emotional support. International Journal of Intercultural Relations, 75, 34–47. https://doi.org/10.1016/j.ijintrel.2020.01.002

Schaufeli, W. B., & Bakker, A. B. (2003). Utrecht work engagement scale: Preliminary manual. Occupational Health Psychology Unit, Utrecht University, Utrecht, 26(1), 64–100.

Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In Work engagement: A handbook of essential theory and research (Vol. 12, pp. 10–24). Psychology Press.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: a Two Sample Confirmatory Factor Analytic Approach. Journal of Happiness Studies, 3(1), 71–92. https://doi.org/10.1023/A:1015630930326

Shirom, A. (2010). Feeling energetic at work: On vigors antecedents. I AB Bakker & MP Leiter (Red.), Work engagement: a handbook of essential theory and research (s. 69-84). Hove: Psychology Press.

Simons, J. C., & Buitendach, J. H. (2013). Psychological capital, work engagement and organisational commitment amongst call centre employees in South Africa. SA Journal of Industrial Psychology, 39(2), 1–12. http://dx.doi.org/10.4102/sajip.v39i2.1071

Sun, C., Feng, X., Sun, B., Li, W., & Zhong, C. (2022). Teachers' Professional Identity and Burnout among Chinese Female School Teachers: Mediating Roles of Work Engagement and Psychological Capital. International Journal of Environmental Research and Public Health, 19(20). https://doi.org/10.3390/ijerph192013477

Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In Work engagement: A handbook of essential theory and research. (pp. 54–68). Psychology Press.

Tabaziba, K. R. (2015). Psychological capital and work engagement: An investigation into the mediating effect of mindfulness. University of Cape Town. http://hdl.handle.net/11427/13793

Tamar, M., & Wirawan, H. (2020). The Effect of Psychological Capital on Work Engagement: Investigating the Moderating Effect of Gender and Job. 535–542. https://doi.org/10.5220/0008591705350542

Van Wingerden, J., & Poell, R. F. (2019). Meaningful work and resilience among

teachers: The mediating role of work engagement and job crafting. PloS One, 14(9), e0222518. https://doi.org/10.1371/journal.pone.0222518

Wang, X., Liu, L., Zou, F., Hao, J., & Wu, H. (2017). Associations of Occupational Stressors, Perceived Organizational Support, and Psychological Capital with Work Engagement among Chinese Female Nurses. BioMed Research International, 2017, 5284628. https://doi.org/10.1155/2017/5284628

Xu, J., Liu, Y., & Chung, B. (2017). Leader psychological capital and employee work engagement: The roles of employee psychological capital and team collectivism. Leadership & Organization Development Journal, 38(7), 969–985. https://doi.org/10.1108/LODJ-05-2016-0126

Yao, J., Qiu, X., Yang, L., Han, X., & Li, Y. (2022). The relationship between work engagement and job performance: psychological capital as a moderating factor. Frontiers in Psychology, 13, 729131. https://doi.org/10.3389/fpsyg.2022.729131

Zahra, M., Kee, D. M. H., Teh, S. S., & Paul, G. D. (2022). Psychological Capital Impact on Extra Role Behaviour Via Work Engagement: Evidence from The Pakistani Banking Sector. International Journal of Banking and Finance, 17(1), 27–52. https://doi.org/10.32890/ijbf2022.17.1.2