Jurnal Kemanusiaan

Full Paper

THE ROLE OF QUALITY OF WORK-LIFE AS MEDIATOR IN EFFECT OF PSYCHOLOGICAL CAPITAL ON WORK ENGAGEMENT AMONG EMPLOYEES IN COMPANY X IN BATAM, INDONESIA

Hudznuza Jalil*, Amalina Binti Ibrahim

School of Human Resources Development and Psychology, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

*Corresponding author jalilhudznuza@gmail.com

Received: 5th December 2022
Received in revised form: 8th June 2023
Accepted: 20th June 2023
Published: 28th June 2023

Abstract

Today workforces encounter challenging situations. Experts and leaders stated that we currently live in a volatile, unstructured, complex, and ambiguous (VUCA) environment. Moreover, external factors outside organizational circumstances including psychological and emotional state might influence work engagement. However, PsyCap was found to buffered and combat these negative reactions in the workplace. Quality of Work Life (QWL) was also found to be affecting work engagement. Therefore, this study aimed to explore the role of QWL among the effects between PsyCap and work engagement among employees in Company X in Batam, Indonesia. This cross-sectional study used a quantitative design and obtained the data using questionnaires. The data was analyzed using PROCESS Version 4.1. by Hayes (2020) in SPSS Version 25.0. The result shows PsyCap and QWL effects work engagement positively. Moreover, PsyCap was also found to positively effects QWL. Lastly, the result also shows that QWL partially mediated the effect between PsyCap and work engagement.

Keywords: Psychological capital, work engagement, quality of work life, employees, manufacturing employees.

1.0 INTRODUCTION

Employees are an essential investment in a company. According to Sri Mulyani, the Minister of Finance in Indonesia, as a middle-income country, Indonesia has to maximize human resources to compete in a global level economy (Berita Satu, 2018). To compete at a global level, engaged workers are needed for the company to retain in the market and achieve the company goals. Engaged employees also known as work engagement refer to a positive state of mind related to work characterized by vigour, dedication, and absorption (Schaufeli et al., 2002). Otherwise, a low level of work engagement cost a large amount of lost productivity and absenteeism problems (Neuber et al., 2022; Padmakumar & Prabhakar, 2011). Furthermore, the working conditions faced by employees may affect employees individually. Previous studies have found that positive psychological capacities may combat employee stress and turnover (Avey et al., 2009). These positive psychological capacities are also known as psychological capital (PsyCap). PsyCap refers to a positive psychological state of development that is characterized by confidence, optimism, hope, and resiliency (Luthans et al., 2007). PsyCap can act as a buffer and combat negative reactions, specifically in the workplace (Avey et al., 2008).

Work and life are interrelated. Work becomes an essential element in an individual's life. Therefore, companies that facilitate the improvement and development of their workers could benefit both organization and individual workers. The company offers a quality of work-life is beneficial to retain employees and attracting new talents (Boonrod, 2009), also important for worker's intention to stay at the job (Yirik & Babür, 2014). Quality of work-life (QWL) refers to the workplace's favourable conditions and environment that supports and enhances employee satisfaction by giving rewards, job security and opportunities (Lau & May, 1998). According to Sirgy et al. (2001), the basic needs to be fulfilled at work are the needs of survival, social, ego and self-actualization. Companies that provide QWL are also essential to satisfy the worker needs as part of employees' life satisfaction (Mohamad & Mohamed, 2012). Therefore, previous studies have highlighted the critical advantage of quality of work-life for both people and the organization.

According to Gallup State of Global Workplace Report 2021 (Gallup, 2021), a global analytics and advice firm that operates in more than 20 countries, global engagement scored 20%. Gallup experienced for collecting data for more than 80 years in over 160 countries (Gallup, n.d.). Moreover, thirty-five million respondents were on Gallup's database for engagement surveys. Specifically, Indonesia's engagement score is 22%, slightly higher than the global average engagement score. Indonesia's

engagement score compared with other countries from the same continents, such as the Philippines (32%), Thailand (25%), and Cambodia (24%), Indonesia's engagement score is still relatively low (Gallup, 2021). Therefore, according to the report, approximately eight out of ten Indonesian employees are not engaged in their work.

Today workforces encounter challenging situations. Experts and leaders stated that we currently live in a volatile, unstructured, complex and ambiguous (VUCA) environment (Bennett & Lemoine, 2014). This 'VUCA environment' refers to rapid unpredictable changes that make it difficult for existing models to deal with complexity and uncertainty (Mack & Khare, 2016). Moreover, the WHO (World Health Organization) declared COVID-19 as a global pandemic on March 11, 2020 (Harrington, n.d.). According to the study by Adnan and colleagues, as the consequences of the COVID-19 outbreak, the environment is getting more volatile, uncertain, complex and ambiguous in Indonesia (Adnan et al., 2021). While the world is ready to face the endemic, however, the VUCA world already amplified. During rapid changes and uncertainty, employees might experience job stress and burnout (Dima et al., 2021). Consequently, it would decrease their work engagement level (Moura et al., 2014). Therefore, retaining and developing work engagement among employees has been challenging in this era.

External factors outside organizational circumstances that indicate an employee's lives outside work, including individual psychological state and emotional state could also influence work engagement (Ferreira et al., 2020). In other words, what the employees feel and their current psychological state will affect their work engagement. When employees are stressed, it will decrease their work engagement level (Moura et al., 2014). With the current VUCA environment, workers might experience burnout that correlates negatively with work engagement (Schaufeli & Bakker, 2004). Employees experiencing burnout related to health problems and turnover intention (Schaufeli & Bakker, 2004). For several workers, the sudden change could lead to depressive symptoms, and depressive symptoms would have an adverse effect on work engagement (Hakanen & Schaufeli, 2012).

However, the world is trying to deal with the current VUCA environment. People adapted to the current changes and try to live with the 'new normal' situation. It can be seen from the data of Statistics Indonesia, that the economic downturn is slowly rising (Badan Pusat Statistik, 2022) and the employment rate increased in 2022 (Badan Pusat Statistik, n.d). Gallup Workplace 2022 Reported that Indonesia's engagement score also increased to 24% in 2022, from 22% on the last report in 2021. In other words, Indonesia's engagement level could grow throughout this volatile, uncertain, complex and ambiguous environment. Thus, employees' positive psychological capital (PsyCap) may be an important element to retain work engagement in today's environment. The reason is that PsyCap could act as a buffer and combat negative reactions in the workplace (Avey et al., 2008). Thus, this study will identify the importance of PsyCap in retaining and improving employees' work engagement in today's working environment.

Therefore, the study about QWL as a mediator between PsyCap and work engagement is still limited in number. One similar study by Wardani and Anwar (2019) studied these variables among car assembly companies, and suggest other researchers study on other business fields. Therefore, to fill this gap, this study will identify the mediating role of QWL between the effect of PsyCap and work engagement in plastic manufacturing sectors. The study will conduct in Batam, one of the industrialized cities in Indonesia.

2.0 LITERATURE REVIEW AND HYPOTHESIS

Conceptual model

Figure 1 shows the conceptual model of this study. The model proposes that employees' PsyCap have a positive effect on the quality of work life and work engagement. Moreover, quality of work life is proposed to have a positive effect on work engagement. Finally, QWL was proposed as a partial mediator between PsyCap and work engagement.

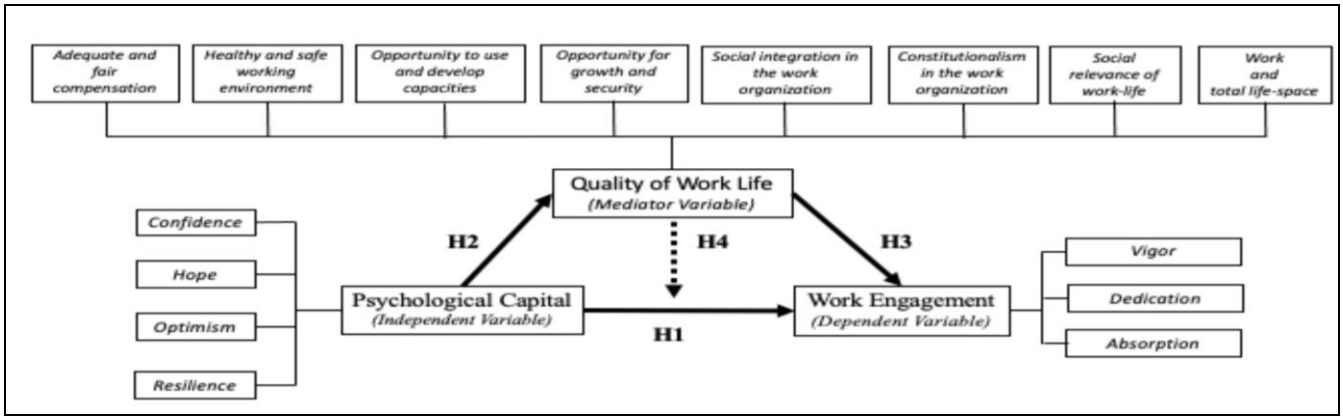

Figure 1 Conceptual model of this study

Psychological capital

Psychological capital derives from psychological capacities of positive organizational behaviour (POB), hope, optimism, resilience, and efficacy (Luthans et al., 2004; Luthans, Youssef, et al., 2007a; Luthans & Youssef, 2004). When the four psychological capacities combine, they become overall PsyCap. Luthans et al. (2007) defined PsyCap as an individual's positive psychological state of development, characterized by (1) confidence to put the effort in for success on challenging tasks, (2) optimism or positive attributions for now and later, (3) preserve on goal and redirect back to goals (hope) if necessary, and (4) able to sustain and bounce back to attain success (Luthans et al., 2007).

Work engagement

Maslach and Leiter (1997) stated that work engagement is indicated by energy, efficacy, and involvement. According to them, work engagement is the opposite of burnout dimensions, exhaustion, cynicism, and ineffectiveness, respectively. Extending from Maslach and Leiter (1997), Schaufeli et al. (2002) introduced a different concept of work engagement as a positive state of mind related to work indicated by vigour, dedication, and absorption. Vigour refers to a strong level of energy and mental resilience at work, dedication relates to employees who are highly attached to their work, and absorption refers to being happily absorbed in a task. Engagement could also be defined as work-related with a large amount of energy and involvement (Bakker et al., 2011) and seen as an affective-motivational state which not only focuses on a specific object, event, individual, or behaviour (Demerouti et al., 2001).

Quality of work life

QWL is a way of thinking about employees, work, and organization (Baba & Jamal, 1991; Nadler & Lawler, 1983). Similarly, Martel & Dupuis (2006) stated the same characteristics of QWL while also including employee's personal life. Since the early development of QWL, it was studied from different fields, including economic, political, psychological and sociological perspectives (Westley, 1979) which leads to different definitions. Therefore, different definitions from different fields make QWL considered a multidiscipline (Nadler & Lawler, 1983; Nanjundeswaraswamy & Swamy, 2013; Pettman, 1981). Psychological capital conceptualized by Luthans and colleagues in the early 2000s, derived from positive organizational behaviour (POB). The well-known characteristics of QWL are from Walton (1973). According to Walton (1973), QWL is characterized by eight criteria, there are (1) adequate and fair compensation, (2) healthy and safe working conditions, (3) opportunity to use and develop human capacities, (4) growth and security, (5) social integration, (6) constitutionalism (7) work and total living space and (8) social relevance. The characteristics of Walton are often used by researchers due to its comprehensiveness because it discusses various aspects of work and life.

Psycap and work engagement

Currently, the world is facing the VUCA environment. During rapid changes and uncertainty, employees might experience job stress and burnout (Dima et al., 2021). These negative reactions would affect employees' work engagement. Previously, a study found that PsyCap could combat negative reactions in the workplace (Avey et al., 2008). Supported by Adil & Kamal (2020) PsyCap could buffer negative reactions in the workplace including burnout. Therefore, a higher PsyCap on employees would help employees to combat the negative reactions in the workplace, thus, improving their work engagement. Previous studies have identified a positive effect between PsyCap and work engagement (Adil & Kamal, 2020; Allahyari Bouzanjani et al., 2021; Q. Chen et al., 2021; Du Plessis & Boshoff, 2018; George et al., 2021a; Gupta & Shaheen, 2017b; Harunavamwe et al., 2020; Joo & Lee, 2017; Karatepe & Avci, 2017; Kotzé, 2018; Kotze, 2018; Li, 2019; Pandey et al., 2020; Shaheen & Krishnakutty, 2018; Toth et al., 2021; Wardani & Anwar, 2019; Wen & Liu-Lastres, 2021). The studies were from various sectors such as healthcare, education, finance, food service, IT, and mining. Several studies also studied specific populations in the workplace, such as ethnicity, and gender. The studies were conducted in the United States, India, South Korea, Northern Cyprus, Iran, Indonesia, Pakistan, and Africa. A study in South Africa also shows a significant positive effect between PsyCap and work engagement even in a country with a high turnover and disengagement rate (Harunavamwa et al., 2020). Moreover, a study by Kotze & Massyn (2019) shows a significant effect between cross-cultural PsyCap on work engagement components, namely vigour and dedication in South Africa. Thus, it was hypothesized that:

Hypothesis 1: PsyCap has a positive effect on work engagement.

PsyCap and quality of work life

The number of studies on the effect PsyCap and QWL are still limited in number. Tho et al. (2014) explore the mediating role of QWL between PsyCap and job performances among marketers in Vietnam. The study shows that PsyCap has a significant positive effect on QWL. Further, Kim et al. (2017) also found that PsyCap positively affects QWL among frontline employees in South Korea. The study also found that QWL affects turnover intention negatively. In other words, a good level of PsyCap on frontline employees is essential to increase employees' quality of working life, thus, essential to decrease turnover intentions and improve employees' service in handling complaints (SRP). A positive effect between PsyCap and QWL also shows in the studies by Kang et al. (2018) and Wardani and Anwar (2019). three out of the four studies used the modified version of the QWL instrument by Nguyen & Nguyen (2012), conceptualized by Sirgy (2001). The dimensions of the instrument are survival needs satisfaction, belonging needs satisfaction and knowledge needs satisfaction. One study used Walton's QWL instrument consisting of eight dimensions. Thus, it was hypothesized that:

Hypothesis 2: PsyCap has a positive effect on the quality of work life.

Quality of work life and work engagement

The studies on the effect of PsyCap and work engagement is very limited, compared to the studies about the relationship between the variables. Based on the literature review, three studies identified positive effects between QWL and work engagement (Karimi & Karimi, 2016; Sun et al., 2022; Wardani & Anwar, 2019). The studies are conducted among nurses, university employees, and private company employees from China, Indonesia and Iran, respectively. However, a study by Sun et al. (2022) among nurses in China shows no significant direct effects between QWL and work engagement. Therefore, the majority of the studies show positive effects between QWL and work engagement, however, one study shows the opposite result. Thus, it was hypothesized that:

Hypothesis 3: Quality of work life has a positive effect on work engagement.

Quality of work life, PsyCap and work engagement

The study on the mediation of QWL between PsyCap and work engagement is very limited. One similar study identified the effects on PsyCap and work engagement with QWL as a mediator in Indonesia's private company by Wardani and Anwar (2019). A total of 356 car assembly employees in Indonesia's multinational company were included in the study. The study shows that QWL partially mediated the effects between PsyCap and work engagement. This study used Walton's QWL instrument, Utrecht Work Engagement Scale (UWES) to measure work engagement and the Implicit Psychological Capital Questionnaire to measure PsyCap. This study used different instruments of PsyCap, while the majority of the study used PCQ-24. Therefore, shreds of evidence show the partial mediation of QWL on the effects between PsyCap and work engagement. In addition, there is no study yet that identifies the effect of PsyCap on work engagement with the mediating effect of QWL. Therefore, it was hypothesized that:

Hypothesis 4: Quality of work life mediates the effects between PsyCap and work engagement.

2.0 RESEARCH METHODOLOGY

Design and sample

The targeted population in this study are employees who are working in Company X, which is a manufacturing company in Batam, Indonesia. Company X is a manufacturer of plastic parts and components. A total of 136 employees from eleven departments are working in Company X in March 2022. Due to the limited population, this study decided to choose the whole population of the targeted company.

Measurement tool

a. Psychological capital

The psychological capital questionnaire constructed by Luthans et al. (2007) is based on four dimensions, hope, efficacy, optimism, and resilience. The Indonesian version of psychological capital adopted from the Thesis of Rachmita (2021) consists of sixteen items. The instrument has a good reliability score, which scored $\alpha = 0.866$. The PsyCap questionnaire uses a four-point Likert scale from one to four.

b. Work engagement

The work engagement questionnaire by Schaufeli et al. (2006) known as UWES-9 is a short version instrument of work engagement. Instead of using UWES-17, this study uses a shorter version of the work engagement questionnaire. Schaufeli (2006) stated that the reason to shorten the questionnaire is to include as few items as possible because respondents should not be unnecessarily bothered. It also minimizes the likelihood of attrition (Schaufeli et al., 2006). Hence, the shortened version of UWES also has acceptable psychometric properties that can be used to measure work engagement (Schaufeli et al., 2006). This instrument was adapted to Indonesia by Kristiana and colleagues (Kristiana et al., 2019) with a good reliability score, $\alpha = 0.95$. UWES-9 consists of nine items with three items in each dimension. The original study by Schaufeli et al. (2006) also shows good reliability scores while testing the shortened version of UWES across 10 countries, which varied from 0.85 to 0.92. The work engagement questionnaire consists of a seven-point frequency Likert scale from zero to six.

c. Quality of work life

The quality of working life questionnaire by Timossi et al. (2008) adopted from Pertiwi and Harding (2021) shows a good reliability score ($\alpha = 0.96$). Further, the initial Quality of Working Life Questionnaire by Timossi et al. (2008) also shows an excellent reliability score, which also scored $\alpha = 0.96$. The questionnaire consists of 36 items from eight dimensions using a four-point Likert scale from one to four.

Data Analysis

The IBM SPSS version 25.0 software is used to analyze the result. This study will run a preliminary test before the analysis to detect potential data outliers and to test whether the data gathered are normally distributed. The normality assumption will be assessed using skewness and kurtosis. The linearity is assessed by inspections of scatterplots and considered linearly related if the scatterplot is oval-shaped (Tabachnick & Fidell, 2006). Furthermore, the mediation analysis will be tested using PROCESS Version 4.1. by Hayes (2020) in SPSS Version 25.0.

3.0 RESEARCH FINDINGS

Demographic characteristic

The demographic characteristics ranged from gender, age, education, and the year of service. A total of 136 questionnaires were distributed to all of the employees working in Company X. The total of 136 questionnaires were returned and contained no missing values. However, three cases are deleted due to outliers. Hence, 114 questionnaires were considered for further analysis. The age of the participants ranged from below 21 to 50 years old. The majority of the respondents ranged from 31 to 41 years old counted for 42.1%. Of the total of 114 respondents, 34 respondents are male and 80 respondents are female. Male respondents counted for 29.8% and female respondents counted for 70.2%. it indicates that the majority of the employees were female, which contributes to almost three-quarters of the respondent. Furthermore, the majority of the respondent's education is from Senior High School, more than three-quarters of the respondents counted for 101 (88.6%). More than half of the respondents are working within one to five years, counted for 68 respondents (59.7%). The demography of the respondents is shown in Table 1.

Demographic Information		Frequency	Percentage
Age	<20	6	5.2%
	21-30	42	36.9%
	31-40	48	42.1%
	41-50	15	13.2%
	No category	3	2.6%
Gender	Male	34	29.8%
	Female	80	70.2%
Education	Senior High School	101	88.6%
	Diploma Degree	3	2.6%
	Bachelor Degree	10	8.8%
Year of Service	<1	32	28%
	1-5	68	59.7%
	6-10	9	7.9%
	11-15	3	2.6%
	>16	1	0.9%
	No category	1	0.9%

Table 1. Demography of Respondents

The effect between PsyCap and work engagement

Based on the analysis, the R-squared value by 0.08. In other words, PsyCap explains about 0.08 or 8% of the variance in work engagement. As shown in Table 2, the result shows that PsyCap significantly affects work engagement (b= 0.57, p= <0.01). In other words, increasing PsyCap by 1% would have increased work engagement by 57%. Moreover, the coefficient shows a positive sign. Therefore, there is a positive effect which means increasing the value of PsyCap could increase work engagement. On the contrary, decreasing PsyCap on employees could also decrease work engagement levels. Thus, H1 is accepted.

	Coefficient	SE	t	p
Constant	19.58	8.41	2.33	0.0217
PsyCap	0.57	0.17	3.27	0.0014

Table 2. Coefficient of PsyCap and work engagement

The effect between PsyCap and QWL

The result shows that the R is valued at 0.27 and the R-squared at 0.073. Therefore, QWL affects PsyCap by 7.3%. Further, the findings show that PsyCap significantly affects QWL (b= 0.82, p= <0.01) as shown in Table 3. The effect between PsyCap and QWL shows the biggest potion among the path. Moreover, the p-value is lower than 0.01, which means that increasing PsyCap by 1%, would increase QWL by 82%. The result also shows a positive effect between the variables. In other words, increasing PsyCap would increase QWL, and decreasing PsyCap would decrease QWL. Therefore, H2 is accepted.

	Coefficient	SE	t	p
Constant	53.48	13.29	4.02	0.0001
PsyCap	0.82	0.27	2.98	0.0035

Table 3. Coefficient of PsyCap and QWL

The effect between QWL and work engagement

According to the mediation analysis, the independent variable and the mediator variable at the same time affect the dependent variable. In other words, PsyCap and QWL consider the effects of work engagement at the same time. The R-squared between PsyCap and QWL with work engagement was valued at 0.17. Therefore, work engagement affects PsyCap and QWL by 17%. Hence, 83% would be affected by other variables. Furthermore, as shown in Table 4, the result shows that QWL significantly affects work engagement (b= 0.19, p= <0.01). It indicates that increasing QWL by 1% would increase work engagement by 19%. A result shows a positive sign, therefore there is a positive significant effect between QWL and work engagement. Hence, by increasing QWL, the work engagement level would also increase. Therefore, H3 is accepted.

	Coefficient	SE	t	p
Constant	9.36	8.617	1.08	0.28
PsyCap	0.41	0.173	2.40	0.018
QWL	0.19	0.057	3.33	0.001

Table 4. Coefficient of PsyCap and QWL with work engagement

The mediating effect of QWL between PsyCap and work engagement

As shown in Table 5, it shows that QWL mediates the effects between PsyCap and work engagement (b= 0.41, p= 0.018). The p-value considers significant, which is lower than 0.05. In addition, the mediation considers partial mediation because the p-value is still significant whether the mediation variable is included or excluded from the path. Hence, even with the QWL present, PsyCap still has a significant effect on work engagement. Therefore, QWL partially mediates the effect between PsyCap and work engagement, and H4 is accepted.

		M (QWL)				Y (WE)		
		Coeff	SE	p		Coeff	SE	p
X (PsyCap)	**a**	0.82	0.27	<0.01	**c'**	0.41	0.17	0.018
M (QWL)	**-**	-	-	-	**b**	0.19	0.057	<0.01
Constant	**i1**	53.48	13.29 R^2 = 0.07	<0.01	**i2**	9.35	8.61 R^2= 0.17	0.28

Table 5. Mediation analysis

4.0 DISCUSSION AND CONCLUSION

The first objective of the study is to explore the effect between PsyCap and work engagement among employees in Company X in Batam, Indonesia. It was hypothesized that there is a positive effect between PsyCap and work engagement. The result shows that there is a significant positive effect between PsyCap and work engagement (b= 0.57, p= <0.01), thus H1 is accepted. Therefore, positive psychological capacities (PsyCap) in employees are essential to improve their work engagement. In line with previous findings, this study shows that PsyCap affects work engagement positively. Previous studies also found the same result even in culturally diverse employees or in diverse industries. Not only could it improve work engagement, but PsyCap is also essential for tackling negative reactions in the workplace. This study shows that employees in Company X show a significant effect between PsyCap and work engagement. Therefore, if company X wants its employees to have a good work engagement level, the management should consider hiring a person with a good level of PsyCap. Another option the Company X management could also consider is improving employees' PsyCap because PsyCap is open for further development.

The second objective of the study is to explore the effects between PsyCap and QWL among employees in Company X in Batam, Indonesia. It was hypothesized that there is a positive effect between PsyCap and QWL. The result shows that there is a significant positive effect between PsyCap and work engagement (b= 0.82, p= <0.01) and the highest coefficient between the path. It indicates that the higher employee's PsyCap, the higher they will be satisfied with their QWL. Therefore, the second hypothesis (H2) is accepted. This was in line with previous studies that show positive effects between PsyCap and QWL. Kang et al. (2018) and Kim et al. (2017) studies show a significant positive effect between PsyCap and QWL among hospitality employees in the US ((b= 0.50, p= <0.001), and South Korea (b= 0.84, p= <0.001). The study by Nguyen and Nguyen (2012) and Tho et al. (2014) also shows a significant positive effect on the path among marketers in Vietnam (b= 0.67, p= <0.001; b= 0.70, p= <0.001). Compared to the study in the US, Asia's continent shows a higher coefficient between the path. Both the Indonesia studies' p-value is less than 0.01, and the rest of the studies show a higher p-value that is less than 0.001. There are several advantages to satisfying an employee's QWL, such as attracting new talent and an employee's intention to stay at the job (Yirik & Babur, 2014). However, basic needs among employees are different, and it would be hard to satisfy the needs one by one. Therefore, rather than focusing only on improving the offer of QWL, company X could consider including the importance of PsyCap on QWL. This study and previous findings show that individuals who have higher positive psychological capital (PsyCap) would have higher satisfaction with their QWL. It indicates that when company X hires employees with a higher level of PsyCap, because of their positivity, they will have a higher satisfaction on their QWL. Therefore, both PsyCap and QWL are important for the plastic manufacturing industry, especially Company X, to attract and retain their employees. In conclusion, a higher PsyCap in the plastic manufacturing industry will lead to higher employee satisfaction with their QWL.

The third objective of the study is to identify the effects between QWL and work engagement. It is hypothesized that there is a positive effect between QWL and work engagement among employees working in Company X in Indonesia. The result shows a significant positive effect between QWL and work engagement (b= 0.19, p= <0.01). The result indicates that increasing QWL by 1% would increase work engagement by 19%, with a significant p-value less than 0.01. Moreover, QWL and work engagement path is the lowest coefficient among any other path. Improving QWL in the workplace will be aligned with increasing employee work engagement. Therefore, the third hypothesis (H3) is accepted. This result was aligned with a previous study by

Karimi & Karimi (2016) that shows a positive effect between QWL and work engagement among university employees in Iran (b= 0.40, p= <0.01). It indicates that increasing university employees' QWL in Iran by 1% would increase their work engagement by 40%. Further, the study by Sun et al. (2002) also shows significant positive effects on the path among nurses in China (b= 0.46, p= <0.001). Moreover, the study by Wardani and Anwar (2019) also shows a positive effect between QWL and work engagement among car assembly employees in Indonesia (b= 0.13, p= <0.01). The studies show that the effects of the path are higher in Iran and China among university teachers and nurses, with the coefficient value is 0.40 and 0.46. Sun et al. (2002) also show a higher p-value with less than 0.001, with the rest of the study counted only for 0.01. On the contrary, the coefficient value between the path is lower in Indonesia. Specifically, this study's coefficient counted as 0.19, while Wardani and Anwar (2019) counted it as 0.13. The difference may occur due to different kinds of industries or different regions and cultures. Further study is needed to study more about this path since the study of QWL and work engagement, especially in the manufacturing industry, is still limited. The primary drive of a person to work is to fulfil their basic needs. Therefore, employees expect their company to fulfil their needs at work. Hence, to improve work engagement, the expectation of employees to meet their needs at work (QWL) should be higher. This study indicates that higher employee satisfaction with their QWL aligns with increasing their work engagement level. Further, QWL not only could improve employees' work engagement but could also affect other life domains, such as family, health, leisure, and friendship. Satisfied employees about their work and life would contribute positively to the company.

The fourth objective of the study is to identify the mediating effects of QWL between PsyCap and work engagement. It was hypothesized that QWL partially mediates the effects between PsyCap and work engagement. In line with the hypothesis, the result shows that QWL partially mediates the effect between PsyCap and work engagement (b= 0.41, p= 0.018). The p-value considers significant (p= <0.05) whether the mediation variable is included or excluded from the path. Even with the QWL present, PsyCap still has a significant effect on work engagement. Therefore, the result indicates that the effects are partial because the effects are still significant. Hence, H4 is supported.

Moreover, The study about the mediation of QWL between PsyCap and work engagement is very limited. One similar study by Wardani and Anwar has studied this path and shows that QWL partially mediates the effects between PsyCap and work engagement (b= 0.16, p= <0.01). The p-value is higher (p= <0.01), compare to this study (p= <0.05). Therefore, the significance level of Wardani and Anwar (2019) is higher compared to this study. The difference may be because of different kinds of jobs, work cultures, and industries. Manufacturing and assembly are in different industries and have different kinds of jobs. Wardani and Anwar (2019) also did not mention the specific city where they conducted their study. Since Indonesia is a big country, there will be differences in work cultures across cities. Moreover, Wardani and Anwar's (2019) respondents are from a multinational company, while in this study are a local company. Therefore, there will be kinds of factors, including workplace culture and jobs, that could affect the effect between PsyCap and work engagement.

According to the JD-R model by Bakker and Demerouti (2008), personal resources and job resources are interlinked. In this study, personal resources refer to PsyCap as described in the model (refer to Figure 2.1). Personal resources include optimism, efficiency, resilience, and self-esteem, which are the dimensions of PsyCap. Further, job resources consist of autonomy, performance feedback, social support, and supervisory coaching, which is part of QWL. It indicates that PsyCap and QWL could work interlinked, which initiates the motivational process that leads to work engagement. Moreover, PsyCap or QWL alone could also act as independent predictors of work engagement (Bakker & Demerouti, 2008; Xanthopolou et al., 2007). This was in line with this result, PsyCap and QWL show a positive effect on work engagement. PsyCap. Even with the QWL present as a mediator, PsyCap still has a significant effect on work engagement. Therefore, both PsyCap and QWL are enlaced, which could predict work engagement.

In conclusion, the purpose of this study is to identify the mediating effect of QWL between PsyCap and work engagement among employees working in Company X in Batam, Indonesia. This study also identifies the effect of PsyCap on QWL and work engagement, also QWL with work engagement. This study is conducted to fill the study gap due to limited research about this path. In sum, the result of this study shows that QWL partially mediates the effects between PsyCap and work engagement. It indicates that PsyCap could improve QWL, thus, leading to higher work engagement. Even if the QWL is included or excluded, PsyCap still has a significant effect on work engagement because QWL partially mediated the effects between PsyCap and work engagement. Moreover, employees with a higher PsyCap would have a higher work engagement and be more satisfied with their QWL. Therefore, the more employees are satisfied with their QWL, the higher their work engagement level.

References

Adil, A., & Kamal, A. (2020). Authentic leadership and psychological capital in job demands-resources model among Pakistani university teachers. International Journal of Leadership in Education, 23(6), 734–754. https://doi.org/10.1080/13603124.2019.1580772

Adnan, R. S., Anam, F. K., & Radhiatmoko, R. (2021). The Vuca Era Creates Covid-19 Pandemic In Indonesia Being Complicated. Sosiohumaniora, 23(3), 437. https://doi.org/10.24198/sosiohumaniora.v23i3.29744

Allahyari Bouzanjani, A., Bahadori, P., & Nikoonam, P. (2021). Nurses' Empathetic Behaviors: The Direct and Indirect Effect of Their Spiritual Orientation. Journal of Religion and Health, 60(1), 134–152. https://doi.org/10.1007/s10943-019-00966-9

Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. Human Resource Management, 48(5), 677–693. https://doi.org/10.1002/hrm.20294

Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change?: Impact of psychological capital and emotions on relevant attitudes and behaviors. Journal of Applied Behavioral Science, 44(1), 48–70. https://doi.org/10.1177/0021886307311470

Baba, V. V., & Jamal, M. (1991). Routinization of job context and job content as related to employees' quality of working life: A study of Canadian nurses. Journal of Organizational Behavior, 12(5), 379–386. https://doi.org/10.1002/job.4030120503

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. European Journal of Work and Organizational Psychology, 20(1), 4–28. https://doi.org/10.1080/1359432X.2010.485352

Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. In Business Horizons (Vol. 57, Issue 3, pp. 311–317). Elsevier Ltd. https://doi.org/10.1016/j.bushor.2014.01.001

Berita Satu. (2018, May 18). Sri Mulyani: Kita Perlu Bangun Kualitas SDM dan Infrastruktur - YouTube. In Youtube.com.

Boonrod, W. (2009). Quality of working life: perceptions of professional nurses at Phramongkutklao Hospital. Journal of the Medical Association of Thailand = Chotmaihet Thangphaet, 92 Suppl 1(February 2009), 6–15.

Chen, Q., Liu, C., Lu, L., Li, M., Chen, Y., & He, J. (2021). Job resources and perceived marketability: A multiple mediation model. Current Psychology, 0123456789. https://doi.org/10.1007/s12144-021-02442-8

Demerouti, Evangelia., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. Scandinavian Journal of Work, Environment and Health, 27(4), 279–286. https://doi.org/10.5271/sjweh.615

Dima, G., Meseșan Schmitz, L., & Șimon, M.-C. (2021). Job Stress and Burnout among Social Workers in the VUCA World of COVID-19 Pandemic. Sustainability, 13(13), 7109. https://doi.org/10.3390/su13137109

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, 1–9. https://doi.org/10.4102/sajhrm.v16i0.1007

Ferreira, P., Gabriel, C., Faria, S., Rodrigues, P., & Pereira, M. S. (2020). What if employees brought their life to work? The relation of life satisfaction and work engagement. Sustainability (Switzerland), 12(7), 1–12. https://doi.org/10.3390/su12072743

Gallup. (2021). State of the Global Workplace 2021 Report. In Employee Engagement Insights for Business Leaders Worldwide.

George, O. J., Okon, S. E., & Akaighe, G. O. (2021). Psychological Capital and Work Engagement among Employees in the Nigerian Public Sector: The Mediating Role of Emotional Intelligence. International Journal of Public Administration. https://doi.org/10.1080/01900692.2021.2001010

Gupta, M., & Shaheen, M. (2017). The relationship between psychological capital and turnover intention: Work engagement as mediator and work experience as moderator. Jurnal Pengurusan, 49(June), 117–126. https://doi.org/10.17576/pengurusan-2017-49-10

Hakanen, J. J., & Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. Journal of Affective Disorders, 141(2–3), 415–424. https://doi.org/10.1016/j.jad.2012.02.043

Harrington, J. (n.d.). WHO Director-General's opening remarks at the media briefing on COVID-19. Retrieved May 1, 2021, from https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the- media-briefing-on-covid-19 11-march-2020

Harunavamwe, M., Nel, P., & van Zyl, E. (2020). The influence of self-leadership strategies, psychological resources, and job embeddedness on work engagement in the banking industry. South African Journal of Psychology, 50(4), 507– 519. https://doi.org/10.1177/0081246320922465

Hayes, A. F. (2022). Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-Based Approach. The Guilford Press.

Joo, B. K., & Lee, I. (2017). Workplace happiness: work engagement, career satisfaction, and subjective well-being. Evidence-Based HRM, 5(2), 206–221. https://doi.org/10.1108/EBHRM-04-2015-0011

Kang, H. J. (Annette), Busser, J., & Choi, H. M. (2018). Service climate: how does it affect turnover intention? International Journal of Contemporary Hospitality Management, 30(1), 76–94. https://doi.org/10.1108/IJCHM-04- 2016-0185

Karatepe, O. M., & Avci, T. (2017). The effects of psychological capital and work engagement on nurses' lateness attitude and turnover intentions. Journal of Management Development, 36(8), 1029–1039. https://doi.org/10.1108/JMD-07- 2016-0141

Karimi, Z., & Karimi, F. (2016). The structural model of relationship between spiritual intelligence and emotional intelligence with quality of work life and work engagement of employees. International Journal of Management in Education, 10(3), 278–292. https://doi.org/10.1504/IJMIE.2016.077508

Kim, T. (Terry), Karatepe, O. M., Lee, G., Lee, S., Hur, K., & Xijing, C. (2017). Does hotel employees' quality of work life mediate the effect of psychological capital on job outcomes? International Journal of Contemporary Hospitality Management, 29(6), 1638–1657. https://doi.org/10.1108/IJCHM-04-2016-0224

Kotze, M. (2018). How job resources and personal resources influence work engagement and burnout. African Journal of Economic and Management Studies, 9(2), 148–164. https://doi.org/10.1108/AJEMS-05-2017-0096

Kotzé, M. (2018). The influence of psychological capital, self-leadership, and mindfulness on work engagement. South African Journal of Psychology, 48(2), 279–292. https://doi.org/10.1177/0081246317705812

Kotze, M., & Massyn, L. (2019). The influence of employees' cross-cultural psychological capital on workplace psychological well-being. SA Journal of Industrial Psychology, 45, 1–8. https://doi.org/10.4102/sajip.v45i0.1660

Kristiana, I. F., Fajrianthi, F., & Purwono, U. (2019). Analisis Rasch Dalam Utrecht Work Engagement Scale-9 (Uwes-9) Versi Bahasa Indonesia. Jurnal Psikologi, 17(2), 204. https://doi.org/10.14710/jp.17.2.204-217

Lau, R. S. M., & May, B. E. (1998). A Win-Win Paradigm for Quality of. Human Resource Development Quarterly, 9(3), 211–226.

Li, Y. (2019). Leadership styles and knowledge workers' work engagement: Psychological capital as a mediator. Current Psychology, 38(5), 1152–1161. https://doi.org/10.1007/s12144-018-9968-6

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., & 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. In Psychological Capital: Developing the Human Competitive Edge. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195187526.001.0001

Martel, J. P., & Dupuis, G. (2006). Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. Social Indicators Research, 77(2), 333–368. https://doi.org/10.1007/s11205- 004-5368-4

Mohamad, M., & Mohamed, W. N. (2012). A Model of Quality of Work Life, Life Satisfaction and Service Quality. Asian Journal of Business Research, 2(2), 38–51. https://doi.org/10.14707/ajbr.120009

Moura, D., Orgambídez-Ramos, A., & Gonçalves, G. (2014). Role stress and work engagement as antecedents of job satisfaction: Results from Portugal. Europe's Journal of Psychology, 10(2), 291–300. https://doi.org/10.5964/ejop.v10i2.714

Nadler, D. A., & Lawler, E. E. (1983). Quality of work life: perspectives and directions. Organizational Dynamics, 11(3), 20–30. https://doi.org/10.1016/0090-2616(83)90003-7

Nanjundeswaraswamy, T. S., & Swamy, D. R. (2013). Review of literature on quality of worklife. International Journal for Quality Research, 7(2), 201–214.

Neuber, L., Englitz, C., Schulte, N., Forthmann, B., & Holling, H. (2022). How work engagement relates to performance and absenteeism: a meta-analysis. European Journal of Work and Organizational Psychology, 31(2), 292–315. https://doi.org/10.1080/1359432X.2021.1953989

Nguyen, T. D., & Nguyen, T. T. M. (2012). Psychological Capital, Quality of Work Life, and Quality of Life of Marketers: Evidence from Vietnam. Journal of Macromarketing, 32(1), 87–95. https://doi.org/10.1177/0276146711422065

Padmakumar, R., & Prabhakar, G. v. (2011). The role of employee engagement in work-related outcomes. Interdisciplinary Journal of Research in Business, 1(3), 47–61.

Pandey, J., Gupta, M., & Hassan, Y. (2020). Intrapreneurship to engage employees: role of psychological capital. Management Decision, 59(6), 1525–1545. https://doi.org/10.1108/MD-06-2019-0825

Pertiwi, N. I., & Harding, D. (2021). Adaptasi Alat Ukur Quality of Work Life Versi Bahasa Indonesia. Jurnal Psikologi Konseling, 18(1), 908–921.

Pettman, B. O. (1981). The quality of working life. Industrial Management & Data Systems, 81(4–6), 15–19. https://doi.org/10.1108/eb057193

Rachmita, F. (2021). Peran Persepsi Dukungan Organisasi dan Psychological Capital Terhadap Perilaku Keselamatan di PT X. Universitas Gadjah Mada.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. Journal of Organizational Behavior, 25(3), 293–315. https://doi.org/10.1002/job.248

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/10.1103/PhysRevE.63.021114

Shaheen, M., & Krishnankutty, R. (2018). The mediation of psychological capital in the relationship of perceived organizational support, engagement and extra-role performance. International Journal of Knowledge Management, 14(4), 30–45. https://doi.org/10.4018/IJKM.2018100103

Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D. J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. Social Indicators Research, 55(3), 241–302. https://doi.org/10.1023/A:1010986923468

Sun, B., Fu, L., Yan, C., Wang, Y., & Fan, L. (2022). Quality of work life and work engagement among nurses with standardised training: The mediating role of burnout and career identity. Nurse Education in Practice, 58. https://doi.org/10.1016/j.nepr.2021.103276

Timossi, L., Pedroso, B., Francisco, A., & Pilatti, L. (2008). Evaluation of quality of work life: An adaptation from the Walton's QWL model. XIV International Conference on Industrial Engineering and Operations Management, February 2019, 1–17.

Toth, I., Heinänen, S., & Kianto, A. (2021). Psychological capital as a driver for engagement in knowledge-intensive work. Proceedings of the European Conference on Knowledge Management, ECKM, 777–785. https://doi.org/10.34190/EKM.21.053

Walton, R. E. (1973). Quality of Working Life: What Is It? Sloan Management Review, 15(1), 11–21.

Wardani, L. M. I., & Anwar, M. S. (2019). The role of quality of work life as mediator: Psychological capital and work engagement. Humanities and Social Sciences Reviews, 7(6), 447–463. https://doi.org/10.18510/hssr.2019.7670

Wen, H., & Liu-Lastres, B. (2021). Examining the impact of psychological capital on workplace outcomes of ethnic minority foodservice employees. International Journal of Hospitality Management, 94(February), 102881. https://doi.org/10.1016/j.ijhm.2021.102881

Westley, W. A. (1979). Problems and Solutions in the Quality of Working Life. Human Relations, 32(2), 113–123. https://doi.org/10.1177/001872677903200202

Yirik, Ş., & Babür, S. (2014). A study aiming to determine the effect of quality of work life perception of workers of tourism sector on their intention of staying at their job. Mediterranean Journal of Social Sciences, 5(19), 54–61. https://doi.org/10.5901/mjss.2014.v5n19p54