

# Investigating The Effect Of Psychological Capital On Nurses' Positive Attitude And Behavior; Evidence From Indonesia

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**ABSTRACT:** This study aims to examine the effect of Psychological Capital (PsyCap) on nurse's positive attitudes and work behaviours. Participants were nurses recruited from six different cities located in eastern part of Indonesia. Data were collected using a three-wave data collection technique. The final data collection stage documented a three-wave data set from 637 participants. Most participants were women (529, 90.6%), held bachelor degree (49.3%), the average of age was 30.15 ( $SD=6.69$ ), and the average of tenure was 7.27 ( $SD=6.14$ ). The results showed that after controlling the impact of age, tenure, and education, PsyCap had positive impact on organizational commitment ( $\beta=0.25, p<0.001$ ), job satisfaction ( $\beta=9.72, p<0.01$ ), work-engagement ( $\beta=0.23, p<0.001$ ), and Organizational Citizenship Behavior ( $\beta=0.39, p<0.001$ ). These findings indicated that PsyCap consistently impacted positive work attitudes and behaviours among nurses in Indonesia.

**KEYWORDS:** PsyCap, Positive, Work-Engagement, Commitment, Satisfaction, OCB, and Nurse

## I. INTRODUCTION

Management of Human Resources (HR) is considered to be a pivotal aspect of encouraging organisational growth. Moreover, organisation needs reliable HR to survive in a competitive era. Therefore, many strategies and studies were implemented and conducted to find the right HR strategy for organisations.

Industrial and Organizational Psychology (IOP) is sub-fields of the Psychology that studies various aspects of Psychology (including behaviour and mental processes) in Industrial and Organisational realm (Kottke, Shoenfelt, & Stone, 2014). IOP focuses on applying science and practice of Psychology in HR management. Thus, the existence of its science and practice afford another good-plus suggestion to HR management.

Applied Psychology in HR management has reached various industrial sectors and organisations. Through appropriate developments, HR is improved and competed with diverse strategies (Kramar, 2014; Ulrich, Brockbank, Yeung, & Lake, 1995). The competition continuously emerges as a part of the global challenge (Lee & Peterson, 2000), which demands the organisations to improve the quality of its human resources.

The use of Applied Psychology in managing health services is growing. A myriad of studies has presented to observe Psychological variables in the management of health services (Bradbury-Jones, 2015; Brunetto, Farr-Wharton, & Shacklock, 2011; Finocchiaro, Roth, & Connelly, 2014; Laschinger & Fida, 2014a). These studies are related to psychology and HR management of health cares particularly on understanding nurse's behaviours. In this regard, applied Psychology contributes to the management of human resources in health services.

Researchers and practitioners seek to find the source of positive behaviour and work attitudes (i.e. Jones, Jones, Latreille, & Sloane, 2009) that intend to avoid non-productive work behaviours (Zhang & Deng, 2014). Positive behaviours and work attitudes in health care service determine the progress and satisfaction of patients.

Unfortunately, some obstacles in terms of behaviour and work attitudes of nurses still exist. This issue is widespread and occurs in almost all health care centres across the globe. For instance, *work-family conflict* and boredom (Y. Wang, Chang, Fu, & Wang, 2012), work pressure (X. Wang, Liu, Zou, Hao, & Wu, 2017), and internal-organization problem (Brunetto et al., 2011) are among problems generally emerged in health services. Those things directly or indirectly contribute negatively to the performance of nurses.

Some study showed that complaints from customers, non-professional health services, and many service-related problems negatively affect customer satisfaction (Sweeney et al., 2017; Gobel et al., 2016; Wangge et al., 2013; Laksono, 2008). The development of nurse competence has acquainted a standardised education process, but in reality, it requires new approaches to improve the quality of their services in hospitals related to 'soft skills' in a psychological perspective.

Those studies lead to the need for an approach to overcome this problem by utilising the science of psychology and HR management. The approach or strategy is necessary to encourage general health management and improves the quality of health services mainly. Various things determine the quality of health services, and the behaviour of nurses as well as their work attitudes define the expected health services

Those results from the previous research offer solution to improve nurses' positive behaviours and work attitudes. An idea of Psychological Capital or PsyCap (Luthans, Youssef-Morgan, & Avolio, 2015; Youssef-Morgan & Luthans, 2013) has excellent potential to be investigated as an alternative solution. PsyCap's role in increasing positive variables in the organisation has been proven, including in health (Bradbury-Jones, 2015; Laschinger & Fida, 2014b; Nelson et al., 2014).

Moreover, PsyCap could also be a barrier to negative work behaviours and attitudes (Wang et al., 2012). *Psychological Capital* gives strength to that various behaviour and positive attitudes in the workplace. Therefore, the latest research should present PsyCap in accordance with the needs of increasing nurses' behaviour and work attitudes. Based on the information above and intention to improve the quality of health care services, research on the role and development of PsyCap for nurses needs to be conducted.

## II. LITERATURE REVIEW AND HYPOTHESES

### 1. Definition of *Psychological Capital*

Psychological Capital or PsyCap is Psychology modalities which consisted of constructs that have been developed for over ten years (Newman, Ucbasaran, Zhu, & Hirst, 2014). This construct develops from *Positive Organizational Behavior* movement or positive Organizational Behaviour where the influence of Positive Psychology attracted many researchers (Avey, Luthans, & Youssef, 2010). Finally, over the past few years, many studies have continued to develop the application of PsyCap, especially in the management of Human Resources.

Luthans, Youssef-Morgan, & Avolio (2015) defined PsyCap as a high-level variable construct because it consists of four positive variable constructs. Individuals with PsyCap are characterized by the existence of; 1) a good-level confidence (Efficacy) at overcoming problems; 2) an ability to create positive attribution (Optimism) toward its success; 3) willpower to withstand to the journey of achieving goals (Hope), and 4) booster ability to face some complicated problem (Resiliency). The four are abbreviated as HERO (Luthans et al., 2015; Newman et al., 2014).

The PsyCap construct finally becomes another variable that provides both Positive Psychology and Management of HR. PsyCap improves continuously as research and seizes the attention of scientists and practitioners without any criticism of other experts (James B Avey, 2014). Nevertheless, PsyCap continues to be developed as variable constructs examined in various fields of science as well as some disciplines such as Psychology, Business, Management and Health.

### 2. PsyCap and Positive Work Behavior

PsyCap has undergone some developments among scientists and practitioners. This is after research findings that support the positive influence of PsyCap itself. Several recent research results prove the influence of PsyCap on positive work behaviours and attitudes in the workplace.

#### a. PsyCap Contributes to positive Work Behavior

Since the development of PsyCap in 2005 to the end of 2016, research on PsyCap continues to grow. Various research results show PsyCap's positive contribution to various positive work attitudes. The results of the study found that PsyCap made a significant positive contribution to the *Engagement* of workers (Bradbury-Jones, 2015; Thompson, Lemmon, & Walter, 2015). Other studies also support good engagement with workers can further maintain PsyCap owned (De Waal & Pienaar, 2013), PsyCap and the employees' attachment to their work are very closely related.

Other studies also found PsyCap's role in positive work attitudes. That positive needed is well-being as subjective and workplace. The well-being means positive attitude variables related to PsyCap owned by workers (Youssef-Morgan & Luthans, 2015).

Research on the impact of PsyCap on positive work attitudes is not conducted only in the West. Several studies in Asia and Europe have also examined the impact of it. Research conducted by Choi & Lee(2014) in South Korea found that PsyCap was positively related to performance (*self-rating*), cheerfulness in the workplace, and subjective well-being (SWB). On the contrary, the study found that PsyCap had a negative influence on the desire to quit or change work (*turnover*).

Some studies on PsyCap and work attitudes have led to the understanding that the PsyCap construct plays a vital role in the organisation. The presence of PsyCap for individuals as both employee and leader has influences work attitudes in the organisation. Concerning it as necessary, it is undeniable that some organisations participate in developing PsyCap to every employee.

#### b. PsyCap Supportpositive Work Behavior

Research on PsyCap has been conducted to determine the impact of this variable on performance and job satisfaction. For example, at the beginning of the PsyCap development, a study on the relationship of PsyCap to work performance and satisfaction was conducted (Luthans, Avolio, & Norman, 2007). Its results obtained were in line with the theory developed by Luthans and others (2015) and Newman and others (2014). Significantly, they found a significant contribution through the four PsyCap sub-variables on performance and job satisfaction. Besides, Luthans & Youssef (2004) also emphasised that the presence of PsyCap provides competitive advantages for personnel management at the workplace. Its concept in business refers the attention of business people and management to not only concern on capital traditionally. The presence of PsyCap provides an advantage because a space to manage human resources as a superior capital provided. The presence of PsyCap is considered to have an influence on business performance beside the work of employee (Luthans & Youssef, 2004). Furthermore, it increases *Organizational Citizenship Behavior* (Pradhan, Jena, & Bhattacharya, 2016). It generates the opportunity to invest at aPsyCap of company beside a traditional capital.

The findings above describe that PsyCap has also been known as a trigger for innovative performance or innovative performance (Abbas & Raja, 2015) at the company. As an education, PsyCap contributes to the progress of academic performance (Siu, Bakker, & Jiang, 2013). Some of these studies are a piece of evidence to PsyCap which has considerable influence on positive work behaviour in organisations.

#### c. PsyCap Strengthen the Impact of Other Variables

The previous explanation has confirmed that PsyCap creates a positive influence on work behaviour and attitudes. In addition to the scientific evidence, several studies also support PsyCap mediate the relationship between a variable to other variables, especially variables that contribute positively to workers.

An example of mediatingPsyCap effect revealed through several studies along with the influence of leadership. It also determines the performance and attitude of employees (Caillier, 2014; Landis, Hill, & Harvey, 2014; Northouse, 2010) to organisational performance. According to it, the PsyCap links the influence of leadership and its impact on employees closely. It emerges the reinforcement of leadership influences as in the research of the impact of *Authentic Leadership* and employee development (Woolley, Caza, & Levy, 2011) and employee commitment (Rego, Lopes, & Nascimento, 2016). It proves that PsyCap has positive influence at positive variables which already exist in the organisation.

#### 3. *Psychological Capital* Toward Nurses

PsyCap research has been widely circulated in business, education and government organisations. PsyCap's research has also continued to develop in health, especially in managing human resources for nurses. Studies in this region have developed to find out more about the effects of PsyCap to nurses. As with other studies, PsyCap also gives positive impact on nurses' behaviour and work attitudes.

The benefits that provide for the nurse is the presence of PsyCap as a reinforcer in dealing with family-work conflicts and overcoming work saturation (Y. Wang et al., 2012). Besides, it was also found that PsyCap provides an essential role in the early days of being a nurse such as making nurses engage in work (Bradbury-Jones, 2015). Similar to the Bradbury-Jones study (2015), Spence Laschinger & Fida(2014) also found that PsyCap has negative influence on various mental health problems at the beginning of career as a nurse.

This shows that the impact of PsyCap found in various organisations and types of workers also affected nurses. Nurses, as well as some professional workers in general, also have psychological dynamics which certainly requires support. The presence of PsyCap can further strengthen the influence of other positive variables and help nurses in demonstrating productive work attitudes and behaviours at service.

Based on the explanation, it apprehends a positive impact on work behaviour as the following hypothesis:

1. PsyCap contributes toward Organizational Commitment of Nurses (H1)
2. PsyCap contributes toward Work-Engagement of Nurses (H2)
3. PsyCap contributes toward Nurses Job Satisfaction (H3)
4. PsyCap contributes toward Organizational Citizenship Behavior of Nurses (H4).

**III.**

**IV. METHOD**

**Participants and Procedure**

This study was conducted in South Sulawesi, Indonesia. Firstly, one hospital was randomly selected in the city of M, B, P, S, P, and T. These cities were selected because they had a hospital with high grade (either A or B). The population of this study was all nurses who had been registered in the selected hospitals. Secondly, researchers administered 900 survey booklet consisting of demographic information and measurement scales (i.e., PCQ, OCQ, UWES, JSS, and OCBQ). The data were collected using a three-wave technique. As the first step, the demographic and PsyCap (PCQ) data were collected. Two weeks later researchers collected Organizational Commitment (OCQ) data and Job Satisfaction (JSS). Finally, two weeks after, the second step researchers collected OCB data (OCBQ). Participants were assigned with unique codes to match their subsequent responses in a three-wave data collection. Only 637 (71%) out of 900 participants in total were fully involved in the phases of the data collection. The following table 1 describes the distribution of participants in six hospitals:

**Table 1. Numbers of Participants in Each Hospital**

	Frequency	Percent	Valid Percent
RS. M	94	14.8	14.8
RS. T	78	12.2	12.2
RS. P	91	14.3	14.3
Valid RS. S	143	22.4	22.4
RS. P	138	21.7	21.7
RS. B	93	14.6	14.6
Total	637	100	100

The results showed that dominant participants were women (female= 529 (90.6%), male= 55 (9.4%)). Most participants were also married (64.8%). Their level of education was mostly bachelor degrees (49.3%). Meanwhile, the age of participants was in the range of 17 to a maximum of 58 years, with an average age 30.15 (*SD*= 6.69). Their tenure ranged from 1 year to 35 years with an average of 7.27 (*SD*= 6.14).

**Measures**

*Psychological Capital Questionnaire*

*Psychological Capital* was measured using the *Psychological Capital Questionnaire (PCQ)* (Luthans et al., 2015). The dimensions of the PCQ scale are Efficacy, Hope, Resilience, and Optimism. Previous studies supported that PCQ showed evidence of validity and reliability that were under the acceptable research standard (Antunes, Caetano, & Cunha, 2017; Lorenz, Beer, Pütz, & Heinitz, 2016). The scale was administered with a Likert-type scale with response options ranged from 1 (Strongly disagree) to 5 (Strongly agree). The scale is classified as having adequate construct validity with a fit index of RMSEA= 0.07, CMIN/ DF= 2.6, and CFI= 0.90. Also, the scale was found to be reliable with Cronbach's alpha= 0.90. An example of a PCQ item is “Today I see myself success at work.”

*Organizational Commitment Questionnaire (OCQ)*

Organisational Commitment in this study was measured using the Organisational Commitment Questionnaire (Allen & Meyer, 1990). This scale consisted of 16 items using a Likert-type scale with options ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale has three dimensions, namely Affective, Continuance dan Normative each dimension is represented by eight items. The findings indicated that the OCQ was proven to be constructively valid and reliable for research purpose. The Conformity Factor Analysis (CFA) confirmed that the measurement model was fit with RMSEA = 0.06, CMIN / DF = 2, and CFI = 0.97. In addition, the value of Cronbach's alpha was 0.87. An example of this measuring instrument is "this company means a lot to my life."

*Utrecht Work-Engagement Scale (UWES)*

This study also used Utrecht Work-Engagement Scale (UWES), which had been developed previously (Schaufeli & Bakker, 2003). The scale is a Likert Scale with a range of 1 (Strongly Disagree) to 5 (Strongly Agree). The UWES scale had 17 items which were divided into three subscales (i.e., Vigor, Dedication, and Absorption). An example of a UWES item is "I am passionate about my work." Several studies have used this measure and were proven valid and reliable. The CFA found supports for construct validity (RMSEA= 0.07, CMIN/ DF= 2.8, and CFI= 0.95). In addition, this scale was reliable with the value of Cronbach's alpha= 0.96.

*Job Satisfaction Scale (JSS)*

Job Satisfaction Scale (JSS) measures the level of employee job satisfaction (Spector, 1985). The JSS is a 6 point Likert-type scale with responses ranged from 1 (strongly disagree) to 6 (strongly agree). The scale had nine aspects of satisfaction, namely; work, salary, promotion, supervisor, co-workers, benefits, rules and procedures, rewards, and communication. Each aspect was measured with four items, meaning the scale had 36 items in total. The evidence suggested that the scale was sufficiently valid and reliable for research (RMSEA= 0.06 and Cronbach's alpha = 0.94). One of the items is "I am paid as what I did."

*Organizational Citizenship Behavior Scale (OCBS)*

Organizational Citizenship Behavior (OCB) was measured using the Organizational Citizenship Behavior Scale (OCBS). This scale was first introduced by Podsakoff, MacKenzie, & Bommer (1996). It consists of dimensions of Altruism, Courtesy, Civic virtue, Sportsmanship, and Consciousness. Overall, the number of OCBS items is 24 with 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The CFA yielded RMSEA= 0.08 and Cronbach's alpha value is 0.81 suggesting valid and reliable scale. The example of items is "I help other workers who have a heavy workload."

Since the participants were all Indonesian, all measures were adapted to the Indonesia language. Adaptation procedure was applied following rigorous steps to produce a valid and reliable scale. The initial steps included translating the scale into Bahasa Indonesia and then re-translated back from Indonesian into English. Next, a team (consisting bilingual speakers) was established to review each item in the scale. The readability assessment was performed by asking 30 adults to read each item and make sure each item was understood. After the entire series was completed, it then proceeded to test the validity and reliability of the scales.

**V. RESULTS AND DISCUSSION**

**A. Results**

This study revealed the correlations among some necessary job attitudes and behaviours among nurses. The results of descriptive analysis and bivariate correlations between variables as follows:

**Table 2. Descriptive statistics and bivariate correlations**

Variabel	M	SD	PCQ	OCQ	JSS	UWES	OCB
1. PCQ	109.47	9.54	-				
2. OCQ	73.76	8.37	0.25***	-			
3. JSS	145.68	19.73	0.15***	0.56***	-		

4. UWES	76.46	14.85	0.25***	0.24***	0.14***	-
5. OCB	120.90	12.60	0.39***	0.23***	0.20***	0.32***

Information:  $N= 637$ , \*\*\* $p < 0.001$ ,  $M=$  mean,  $SD=$  standard deviation

The results suggested significant relationships among variables, as shown in table 2. The relationships between variables were all significant ( $p < 0.001$ ) with varying levels of relationship starting from  $r = 0.14$  to  $r = 0.56$ . The relationship between Organizational Commitment (OCQ) and Job Satisfaction (JSS) was quite strong with a value of  $r = 0.56$ . In contrast, the relationship between PsyCap (PCQ) and Job Satisfaction was weak with a value of  $r = 0.15$ , as well as a Job Satisfaction relationship with the Utrecht Work Engagement (UWES) which also classified as weak with  $r = 0.14$ . Other relationships between variables were considered as significant in moderate levels ( $r = 0.20$  to  $0.50$ ). These results indicated that all the selected variables were interrelated which later influence nurse's attitudes and behaviours.

**Table 3. the Impact of PsyCap to the Organization Commitment with the Control of Education, Tenure, and Ages**

Model	$R$	$R^2$	$Adj. R^2$	$SEE$	$\Delta R^2$	$\Delta F$	$\beta$	$T$
1 1. Age							-0.03	-0.33
2. Tenure							0.02	0.25
3. Education	0.02	0.00	-0.01	8.26	0.00	0.05	-0.01	-0.15
2 1. Age							-0.02	-0.25
2. Tenure							-0.00	-0.05
3. Education	0.25	0.06	0.05	8.01	0.06	30.35***	-0.02	-0.39
4. PsyCap							0.25***	5.51

Information:  $N= 637$ , \*\*\* $p < 0.001$ ,  $\beta=$  Standardized Beta Weight,  $SEE=$  Standard Error of the Estimate,  $Adj.=$  Adjusted,  $\Delta=$  change

The PsyCap impact on Organisational Commitment, with *Multiple Regression* analysis, can be seen in table 3 above. The researcher tested the impact of PsyCap on Organizational Commitment by controlling several demographic variables from participants (i.e. Age, Working Period, and Education). In the first model, where there were only demographic variables, the model did not predict organisational commitment. This indicated that the age variable ( $\beta = -0.03$ ,  $p > 0.05$ ), tenure ( $\beta = 0.02$ ,  $p > 0.05$ ), and education ( $\beta = -0.01$ ,  $p > 0.05$ ), were not a determinant factors of organizational commitment. Furthermore, in the second model with PsyCap was included in the model, the model increased  $R^2$  up to 0.06 ( $F = 30.35$ ,  $p < 0.001$ ) with  $\beta = 0.25$ ,  $p < 0.001$ . These results indicated evidence that PsyCap was a significant predictor for Organizational Commitment after controlling age, tenure, and participant education.

**Table 4. PsyCap Impact on Job Satisfaction by Controlling Education, Tenure, and Age**

Model	$R$	$R^2$	$Adj. R^2$	$SEE$	$\Delta R^2$	$\Delta F$	$\beta$	$t$
1 1. Age							0.08	0.96
2. Tenure							-0.01	-0.07
3. Education	0.07	0.00	-0.00	19.40	0.00	0.69	-0.04	-0.70
2 1. Age							0.08	0.92
2. Tenure							-0.01	-0.16
3. Education	0.17	0.03	0.02	19.18	0.02	9.72**	-0.04	-0.76
4. PsyCap								

Information:  $N= 637$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ,  $\beta$ = Standardized Beta Weight, SEE= Standard Error of the Estimate, Adj.= Adjusted,  $\Delta$ = change

The results in table 4 showed that PsyCap is the only variable that contributed to job satisfaction ( $\beta= 9.72$ ,  $p < 0.01$ ) and PsyCap added 2.4% variance to the prediction model. As in the previous findings, Age ( $\beta= 0.08$ ,  $p > 0.05$ ), tenure ( $\beta= -0.01$ ,  $p > 0.05$ ), and Education ( $\beta= -0.04$ ,  $p > 0.05$ ) did not contribute significantly to nurse's satisfaction at work. The PsyCap again acted as the only variable that had a significant impact on the nurse's job satisfaction after controlling age, tenure, and participant education.

**Table 5. PsyCap Impact on Work Engagement by Controlling Education, Tenure and Age**

Model	<i>R</i>	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	SEE	$\Delta R^2$	$\Delta F$	$\beta$	<i>t</i>
1 1. Age							-0.22	-2.80**
2. Tenure							0.19	2.45*
3. Education	0.13	0.02	0.01	14.91	0.02	2.82*	-0.02	-0.13
2 1. Age							-0.20	-2.62**
2. Tenure							0.16	2.10*
3. Education	0.27	0.07	0.06	14.51	0.05	27.05***	-0.01	-0.29
4. PsyCap							0.23	5.20***

Information:  $N= 637$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ,  $\beta$ = Standardized Beta Weight, SEE= Standard Error of the Estimate, Adj.= Adjusted,  $\Delta$ = change

The impact of PsyCap on Work-Engagement was also documented. This is provided with more detail in table 5. Model 1, age and tenure had significant impact on Work-Engagement, with the model accounted for 2.8% in the Work-Engagement variance. However, age had a negative impact on Work-Engagement ( $\beta= -0.22$ ,  $p < 0.01$ ) which means that the older a person was, the Work-Engagement would be lower, and vice versa. In addition, tenure had a positive impact on Work-Engagement ( $\beta= 0.19$ ,  $p < 0.01$ ). After PsyCap was included in model 2, PsyCap showed a greater significant impact on Work Engagement ( $\beta= 0.23$ ,  $p < 0.001$ ) beyond Age ( $\beta= -0.20$ ,  $p < 0.01$ ) and tenure ( $\beta= 0.16$ ,  $p < 0.05$ ).

**Table 6. PsyCap's impact on OCB by Controlling Education, Tenure and Age**

Model	<i>R</i>	<i>R</i> <sup>2</sup>	Adj. <i>R</i> <sup>2</sup>	SEE	$\Delta R^2$	$\Delta F$	$\beta$	<i>t</i>
1 1. Age							-0.00	-0.02
2. Tenure							0.03	0.37
3. Education	0.11	0.01	0.00	12.32	0.01	1.82	0.10	2.07*
2 1. Age							0.01	0.21
2. Tenure							-0.01	-0.11
3. Education	0.40	0.16	0.15	11.36	0.15	80.52***	0.08	1.90
4. PsyCap							0.39	8.97***

Information:  $N= 637$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ,  $\beta$ = Standardized Beta Weight, SEE= Standard Error of the Estimate, Adj.= Adjusted,  $\Delta$ = change

The impact of PsyCap on OCB is described in table 6. At the initial model when age, tenure and education were included as predictors, education significantly contributed to the nurse's OCB ( $\beta=0.10$ ,  $p < 0.05$ ). This means

that the higher the education is, the greater the possibility of nurses showing OCB. In the second model, the overall model predicted OCB significantly with 15% towards OCB variance. After PsyCap was included, PsyCap added significant contribution ( $\beta= 0.39, p< 0.001$ ) toward OCB and the effect of education were no longer significant for predicting OCB. Education and PsyCap were found to have significant impact on OCB. However, the inclusion of PsyCap in the model reduced the effect of education in predicting OCB.

## **VI. DISCUSSIONS**

### **1. The Impact of PsyCap on Positive Work Attitudes**

One of jobs that attracted the attention of many scholars was the job of nurses in hospitals. Nurses play an essential role in the process of saving and promoting health and well-being. Therefore, all work processes, attitudes and work behaviour of nurses influence the quality of service towards the salvation and recovery of patients' health in hospitals. It is necessary to investigate further the effect of PsyCap which has been consistently found to be the antecedent of many desired attitudes and behaviours within organisations.

This study has succeeded in collecting empirical evidence and presenting the results of the impact of PsyCap on various positive work attitudes. Also, researchers investigated the impact of PsyCap on some important organizational variables, which included organisational commitment, job satisfaction, and work engagement. This study was conducted in the area of South Sulawesi and randomly selected participants in the six different hospitals. The selection of area and participants depicted the general picture of the variables being studied. It means that it is heterogeneous and able to represent the province of South Sulawesi.

The results generally revealed that PsyCap had an impact on organisational commitment, job satisfaction, and Work-Engagement. The results obtained after controlling the impact that possibly considered by the level of education, age, and period of employment of the nurse. Although they have included all the demographic variables, researchers still find that PsyCap consistently impacts positive work attitudes for nurses.

The results of this study are consistent with previous findings that PsyCap had a positive impact on positive work attitudes (Bradbury-Jones, 2015; Laschinger & Fida, 2014b; Nelson et al., 2014). Moreover, Avey, Reichard, Luthans, & Mhatre (2011) through a meta-analysis study also found that PsyCap had a positive impact on a variety of positive work attitudes such as Work-Engagement, Job Satisfaction, and Organizational Commitment.

Consistently, PsyCap has a significant positive contribution to Engagement of workers (Thompson et al., 2015). PsyCap helps nurses who have just been engaged to work (Bradbury-Jones, 2015). Other studies also supported that Engagement can further maintain PsyCap (De Waal & Pienaar, 2013). PsyCap showed positive effect on engagement in many studies, while the development of engagement may also maintain one's PsyCap.

Previous research also found that PsyCap had an impact on organisational commitment and job satisfaction (Larson & Luthans, 2006). The results of this study also support it as the reason to maintain the expected job satisfaction and work behaviour (Bergheim, Nielsen, Mearns, & Eid, 2015). A similarity was found in previous studies that examined the impact of PsyCap measurements on performance and job satisfaction (Luthans et al., 2007b).

All the results of previous studies and theories regarding PsyCap have supported that superior characteristics are sourced from Hope, Optimism, Resilience, and Efficacy. Those positive traits have a positive impact on the work environment (Luthans et al., 2015), including nurse's work environment. The positive influence of PsyCap to organisational commitment, job satisfaction and Work-Engagement is also found in this study. Therefore, this study concluded that PsyCap has a positive impact on nurse's positive work attitudes.

### **2. The Impact of PsyCap on Positive Work Behavior**

The study systematically examined the impact of PsyCap on work behaviour of nurses. The researcher used OCB variables to determine their work behaviour that exceeded the expected performance standards. Generally, nurses have minimum work standards so that measuring OCB can provide more information about superior work behaviour to nurses.

Based on the results of this study, PsyCap also had a positive impact on that OCB nurses. The researcher controls the impact of demographic variables through age, work period, and education to predict the impact of PsyCap on work behaviour. The results obtained indicate that education also has an impact on the high level of OCB, but PsyCap has an impact beyond the influence of education. In other words, the effect of PsyCap on OCB is far stronger than the effect of education so that high PsyCap is able to increase OCB beyond the impact of nurse education.

The results of this study are in line with the theories regarding the impact of PsyCap (Luthans et al., 2015). PsyCap directly has a positive impact on positive work behaviour, especially employee performance (Luthans, Avolio, &

Norman, 2007). Significantly, Luthans and friends found some contribution of PsyCap (both separately and collectively form the four sub-variables) to the job performance and satisfaction. Other than that, Luthans & Youssef (2004) also emphasised that the presence of PsyCap to bring advantages for personnel management at the workplace.

Encourage the performance of the workers as expected by the company, PsyCap has been proven to affect OCB (Pradhan et al., 2016; Shukia & Singh, 2013). This research has established similar findings to the research in which PsyCap also proved to have an impact on OCB. PsyCap has advantages with a combination of four positive psychological traits. It does not only contribute toward the work attitude but also has an impact on work behaviour. This research has contributed to strengthening previous research. PsyCap can influence positive work behaviour as indicated by OCB. Nurses with high PsyCap levels tend to show high OCB. Although nurses work based on specific minimum standards, the presence of PsyCap makes nurses willing to provide extra service or work behaviour. Therefore, the presence of PsyCap supports nurses' positive work behaviour.

### **Limitations and Future Research Directions**

Global-Scale PsyCap research has been conducted by Wernsing (2014) in 12 countries representing diverse cultures in the world. The study discovered that there were some differences to generate across culture PsyCap vary. Unfortunately, researchers cannot conclude the leading causes of these differences but rather suggest various aspects that can influence the interpretation of PsyCap results. Based on the suggestions of this study, researchers conducted an exploratory analysis of the differences in PsyCap and outcomes variables.

PsyCap is the focus of this study. The results of the previous study show that PsyCap has an essential role in influencing various positive work attitudes and behaviours. However, through explorative analysis, the level of PsyCap in each hospital in the study showed a significant difference. Hospitals in a district show a lower average PsyCap value compared to several other districts/cities. The difference is that Nurses in Pinrang Hospital have a lower PsyCap level than other hospitals in the study.

Some highlighted facts were found in the study. Firstly, there was some variations regarding the value of Organizational Commitments across hospitals. The results showed that the commitment of nurse in M Hospital, for example, was significantly lower, compared to hospitals in other districts in this study. The differences shown were classified as significant with diverse values. The data indicates that the commitment of nurse organisations in hospitals. Makassar was lower than other hospital nurses in the study.

Differences in Organizational Commitment also occur in nurse job satisfaction. The results indicated that nurses' job satisfaction differed significantly across hospitals in the study. The nurses in Makassar City also showed a lower average value of job satisfaction compared to other districts. They who work in cities (RS. M) tend to have lower job satisfaction values compared to the nurses who work in district hospitals.

Unfortunately, the researchers did not anticipate the differences between these hospitals so that it was not noticed. Researchers found the difference between these average values after exploring the data obtained. It gives information that the conditions of the work environment and the area of work influences several essential variables in the organisation. It is necessary to be considered to design various policies i.g., giving PsyCap development intervention as Pinrang Hospital did.. The differences on the conditions of the work environment and work area before implementing an appropriate intervention to improve the quality of nurses should be investigated

Therefore, this study suggests that further research needs to examine various conditions or moderator variables that might cause differences in the influence of PsyCap for variable attitudes and work behaviour. Wernsing (2014) had discovered cultural effects in the PsyCap study. However, this effect may also influence the impact of PsyCap on work attitudes and behaviour for nurses.

Second, an intervention needs to be developed, examined, and performed. PsyCap can be developed and become a factor that encourages positive work attitudes and behaviour. Although several studies have been conducted in this regard, it is necessary to examine the impact of the PsyCap intervention on different types of work (i.e. Nurse). In addition, the development of interventions needs to be adapted to the targeted work conditions. For example, online learning may be more appropriate for nurses who have dynamic task schedules.

## **VII. CONCLUSION**

PsyCap among nurses can predict work attitudes and positive work behaviour. If the PsyCap owned by nurses, they will be able to increase Organizational Commitment, work engagement, and Job Satisfaction. Furthermore, it also contributed to OCB nurses. Demographic variables such as age, tenure, and education may also have an impact on attitudes and work behaviour, but the positive impact of PsyCap remains consistent even with the

presence of these demographic variables. The consistent linked to several previous studies regarding the impact of PsyCap on positive work attitudes and behaviours in organisations. This research is another supporting evidence that PsyCap has a consistent impact on cultures and jobs.

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