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## A Meta-Analysis of Psychological Capital and Psychological Well-Being: Testing on Relationship between Self-Efficacy and Self-Acceptance

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**ABSTRACT:** Psychological well-being is variable that's considered suitable to discuss happiness because psychological well-being belongs to the realm of positive psychology that requires the development of positive emotions to ensure individuals have optimal functions and experiences. This study aims to deeply understand the psychological capital and psychological well-being relationships by conducting meta-analysis testing. Data collection in this study followed the Preferred Reporting for Systematic Reviews and Meta-Analysis (PRISMA). The sources or databases of research articles used are Proquest, Psycnet, Emerald, and Google Scholar. The search is carried out from April to May 2021. These results showed the relationship between psychological capital and psychological well-being variables in the moderate and firm positive categories. The effect size included in the moderate and significant positive groups through the analysis process. When viewing the dimensional relationship on both variables, the dimension of self-acceptance in psychological well-being has the strongest relationship with the psychological capital variable. To consider the existence of moderation or intervening variables that affect the relationship of the two variables. Meanwhile, for organization management, the need to pay attention to the psychological capital variables of employees that can be a predictor for their psychological well-being to produce optimal productivity and performance results.

**KEYWORDS:** psychological capital; psychological well-being; self-efficacy; self-acceptance; meta-analysis

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### 1. INTRODUCTION

Research on well-being is considered necessary because a higher level of individual well-being affects human life. Just a small example, research conducted by Lubaomirsky et al. (2005) found that individuals who have higher levels of subjective well-being are more successful in various aspects of life. Subjective well-being, which focuses on individual subjective happiness, gives individuals the ability to think more creatively to be more proficient when solving problems. Happy individuals are more open to social relationships, active, caring, have a stronger immune system, like themselves, and can handle conflict better.

There are two approaches to the concept of well-being, namely, hedonic (subjective well-being) and eudaimonic (psychological well-being) (Ryan & Deci, 2001; Waterman, 2008). The hedonic approach often referred to as subjective well-being, focuses on the individual's subjective happiness and pleasant experiences. Individuals who experience more positive events in their lives and interpret them as positive will have higher satisfaction and happiness (Seidlitz, 1997). Subjective well-being sees life satisfaction, positive and negative effects (Diener, 1984; Waterman, 2008).

Another approach is the eudaimonic approach which focuses on the struggle for self-realization (Waterman, 2008). This approach involves efforts to fulfill the individual's potential (Ryan & Deci, 2001). Ryff (1989) developed a well-being approach based on a eudaimonic approach called psycho-being. Psychological well-being belongs to the realm of positive psychology, which requires the development of positive emotions to ensure individuals have optimal functioning and experiences (Ryan & Deci, 2001). Psychological well-being focuses on the development of individual abilities and personal development. Ryff (1989) explains that psychological well-being is a construct consisting of six dimensions, namely self-acceptance, positive relation with others, autonomy, environmental mastery, purpose in life, and personal growth.

To date, many studies have attempted to understand the relationship between the concept of well-being and other psychological constructs. One of the most studied psychological constructs with well-being is psychological capital. The two Amin, N, Shah (2020) pioneer studies examining the relationship between psychological capital and psychological well-being included research conducted by Culbertson et al (2010) and Amin, N, Shah (2020). Research began to emerge in the next few years that examined the relationship between the two variables, such as research by Rani (2015) and Koller & Hicks (2016). The research looks for the relationship between psychological capital and psychological well-being, including the most recently conducted by

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Kurt & Demirbolat (2019). The results of the research between psychological capital and psychological well-being revealed that psychological capital has a relationship with a person's psychological well-being and has a positive influence (Avey et al., 2010; Luthans & Youssef-Morgan 2017; Choi & Lee, 2014). Raises the interest of researchers in the relationship between these two variables, which sees from the continued increase in research that examines these two variables and has the result that psychological capital is positively related to well-being.

As previously explained, many studies examining the relationship between psychological capital and psychological well-being have been carried out. However, the purpose of this study is to integrate these studies to determine the effect size of the relationship between the two variables from several similar studies carried out since 2002 - 2021. The meta-analysis method is a method that can be used to estimate the effect size of the relationship. both variables (Borenstein, 2009). Therefore, it is necessary to do a meta-analysis method in this study.

One study uses a meta-analysis method using psychological capital and well-being variables, which is a study conducted by Avey et al. (2011). The similarities between the research conducted with Avey et al. (2011) research use the meta-analysis method and the psychological theory of capital based on Luthans et al. (2007). Nevertheless, there are differences between the two. The study of Avey et al. (2011) used the well-being theory developed by Berkman (1971) as cited Avey et al. (2010), while the research was conducted using Ryff (1989) psychological well-being theory. Furthermore, this study uses all the unified dimensions of psychological well-being, while Avey et al. (2011) only take one dimension. In addition to this, well-being in Avey et al. (2011) is one of the desirable employee attitude variable dimensions, not as in this study, where psychological well-being is a latent variable. Based on this, it is necessary to research the relationship between psychological capital and psychological well-being based on Ryff (1989) theory through a meta-analysis method. Psychological capital is at individuals who value their daily lives and increase their chances of success based on effort and persistence. The definition of psychological capital shows that positive psychological abilities can be developed, and this is a good thing to know because psychological capital has an important role in one's self-development (Luthans et al., 2007).

It consists of four dimensions: self-efficacy, optimism, hope, and resilience (Luthans et al., 2007). Self-efficacy represents a person's belief in their abilities when they do something (Hmieleski et al., 2007). Ş (2011) defines optimism as the overall expectation that individuals can obtain a better future. Hope is a tool that motivates individuals to carry out their responsibilities. Several other studies have also shown that hope has a positive relationship with life satisfaction (Valle, M. F., Huebner, E. S., & Suldo, 2004), job satisfaction (Luthans & Youssef, 2004), and work performance, as well as motivation to deal with stressful situations. Resilience is defined as the ability to rise above stressful situations, allowing one to get through difficult situations optimistically. When re-awakened, resilient individuals can refocus on goals (Richardson, 2002).

Psychological capital helps encourage individual performance in an organization or company. Psychological capital is associated with a positive attitude (for example, work engagement) and organizational citizenship, which can be defined as positive voluntary behavior for the betterment of the company. The association of psychological capital in supporting performance was again supported by Luthans et al (2007), who states that psychological capital is the primary construct that can predict individual performance and satisfaction at work.

Individuals with a high level of psychological capital are characterized by hopeful individuals, which are qualities known to be crucial for a leader to possess. Leaders with these qualities can stimulate their employees to determine their respective goals and inspire them to achieve their maximum potential. Individuals with psychological capital also have self-confidence, so they have more confidence in getting. In addition, psychological capital is very influential on how individuals face failure. Individuals will be more resilient and bounce back when facing failure, one of which is work-related. Luthans and Youssef (2004) also state that psychological capital is characterized by optimism that protects individuals from guilt and depression.

Based on the explanation above, it can be concluded that psychological capital is a person's psychological state that develops positively and has important benefits on a person's performance characterized by self-efficacy, optimism, hope, and resilience. Psychological capital can stimulate individuals to maximize their potential and is important in determining one's job satisfaction.

Many studies aim to see the relationship between psychological capital and psychological well-being. The first study that succeeded in proving a positive relationship between psychological capital and psychological well-being was the study by Culbertson et al. (2010), which was conducted with the subject of regional extension agents. Furthermore, the research conducted by Amin N and Shah (2020) was conducted to look at the relationship between psychological capital and psychological well-being in doctors. This study proves that psychological capital has a relationship with psychological well-being. Psychological capital helps the subject face challenges setbacks and can finally improve well-being. Research conducted by Rosalina (2018) and Polatc and Akdoğan b (2014) also had similar results, namely discovering a significant relationship between psychological capital and psychological well-being.

Similar results are evidenced by research conducted by Singh (2015). This study aims to see the role of psychological capital in employees. In line with the research of (Amin, N, Shah, 2020), this study also proves that psychological capital has a

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relationship with psychological well-being. Psychological capital reflects a person's potential to be productive at work and a healthy psychological work environment of a professional in his current institution. This study also suggests that psychological capital is an indicator of the quality of life that helps us be more prosperous and happier.

Furthermore, Rani (2015); Li (2018), and Gyu Park (2017) also conducted research that resulted in a relationship between psychological capital and psychological well-being. The three studies have different subject characteristics, namely, in adult individuals who have not worked in India (Rani, 2015), employees in China who have worked for at least one year (Li, 2018), and employees from eight different companies (Gyu Park, 2017). This research proves that individuals with a high level of psychological capital will have a high level of psychological well-being as well.

The level of psychological capital is also known to increase individual resistance to pressure which often causes burnout so that in the end, it also increases the level of psychological well-being in the subject (Malekitabar, 2016). Research conducted on school principals shows that psychological capital has a significant positive relationship with psychological well-being. In contrast, psychological capital can reduce burnout in school principals so that it can affect the subject's performance while serving at school.

The most recent research on the relationship between psychological capital and psychological well-being was conducted by Mishra & Shafiq (2018) on individuals in early adulthood who are studying; Gibson & Hicks (2018) on employees and students; and Sastaviana (2020) research conducted on employees. This study proves the results are in line with previous studies, namely that there is a positive relationship between psychological capital and psychological well-being. The psychological capital dimension is known to help individuals face the challenges they face. Individuals are also more confident in their abilities and have a more positive view of the future so that their level of psychological well-being is even better.

Hypothesis 1: Psychological Capital has a consistent and stable positive relationship with Psychological Well-Being.

Hypothesis 2: Psychological Capital has an inconsistent and stable negative relationship with Psychological Well-Being.

## **2. MATERIALS AND METHODS**

**Data Collection Strategy.** Data collection in this study followed the Preferred Reporting for Systematic Reviews and Meta-Analysis (PRISMA). PRISMA was created to help ensure clarity and transparency in reporting systematic reviews and meta-analyses. PRISMA is not used as a tool to measure the quality of the juice in a systematic review or meta-analysis study Liberati et al., (2009). PRISMA 2009 underwent an update to PRISMA 2020 (Page et al., 2021). There is an update in the PRISMA 2020 reporting guide. There are 27 checklist items related to reporting details and a revised PRISMA flow diagram.

The approach that will be taken to identify relevant studies with the theme of this research is carried out in several steps. First, the search for relevant literature from various sources or journal databases uses several keywords. Keywords that will be included in the search process include "psychological capital" and "psychological well-being." The sources or databases of research articles used are Proquest, Psycnet, Emerald, and Google Scholar. The search was carried out from April to May 2021.

Inclusion criteria are general characteristics used as research subjects from the target population. The selection in this study begins with the literature search process, and researchers will focus on screening research abstracts. Researchers are looking for articles and final assignments in the form of theses and research dissertations that contain "psychological capital" and "psychological well-being" or "eudaimonia of well-being." The following characteristic that forms the basis for the inclusion of articles in the next stage is research with a quantitative design; participants are at least entering productive age or above 18 years, and in the period 2002 - 2021. After the abstract screening process, the researchers then screened based on full-text. The research articles involved only refer to a specific theoretical definition. In this case, psychological capital refers to Luthans et al. (2007), and psychological well-being refers to Ryff (1989) definition. In line with the definition of variables, the measuring instrument involved is the only research that uses measuring tools developed based on these theories.

Furthermore, research that provides a correlation coefficient value will be included in this study. It can be seen that the search results using keywords in the form of "Psychological capital" and "Psychological well-being" through Proquest, Psycnet, and Emerald yielded 706 articles and final projects in the form of theses and potential dissertations. In addition, the researcher also conducted an exploratory search using Google Scholar and involved nine articles and a final project in the form of a thesis and an additional dissertation. The total number of articles in the final project in the form of theses and dissertations at the identification stage reached 715 articles and the final project in the form of theses and dissertations.

Exclusion criteria are removing subjects who meet the inclusion criteria from the study for various reasons. From 715 articles and final assignments in the form of theses and dissertations, the researcher issued 19 articles and final assignments in the form of theses and dissertations that did not use English/Indonesian to go through the next stage. At the abstract screening stage, researchers look for research articles and final assignments in the form of theses and dissertations containing "psychological capital" and "psychological well-being" or "eudaimonic well-being," research with quantitative research design, and participants at least entering the stages of early adult development. Of the 696 articles and final assignments in the form of theses and dissertations that have been identified, there are only 19 articles and final assignments in the form of theses and dissertations that enter the feasibility study stage based on the full text. Researchers conducted a further study of the full text of research articles. They found that many

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seven articles and final assignments in the form of theses and dissertations had to be excluded from the study because the definition of variables did not refer to the specific theory that had been determined. The measuring instrument did not refer to the appropriate theoretical basis, did not use a total value for each variable, and did not provide a correlation coefficient value so that the total research articles involved in this study amounted to 15 articles and the final project in the form of theses and dissertations. Researchers also performed additional analyzes involving the correlation of PsyCap with each dimension on psychological well-being. After a search according to the steps contained in Figure 1, four articles met the requirements. One article is the same as the hypothesis analysis, namely the article from Rani (2015). These five articles were obtained from ProQuest and Google Scholar.

*Literature Search.* Keywords that will be included in the search process include "psychological capital" and "psychological well-being." The sources or databases of research articles used are Proquest, Psycnet, Emerald, and Google Scholar. The search was conducted from April to May 2021. The final results of the literature search were 15 articles and a final project in the form of a thesis and a dissertation for the main analysis, and four journal articles for additional analysis.

*Meta-analysis method.* There are two model approaches in meta-analysis research, namely the fixed-effect model and the random-effect model. In the fixed-effect model, the researcher departs with the assumption that there is one actual effect size, and this can be interpreted as having only one effect size value (no diversity). The difference in effect size in various studies occurs due to sampling error.

Meanwhile, in the random-effect model, the value of actual effect size is assumed to vary in each study (Borenstein, 2009). Researchers expect that there are indeed differences in inaccurate effect sizes in each study, and this encourages researchers to use a random-effect model approach in this study. This model is more appropriate to be carried out in social research involving various methodologies. In addition, the results of hypothesis testing in this model tend to be unconditional and can be generalized to a large population (Borenstein, 2009).

*Effect Size Calculation.* Effect size in this study refers to the value of the correlation coefficient, and the value of the correlation coefficient of the two variables can be used as an index effect size. In most meta-analytical studies, the synthesis process is not directly carried out on the correlation coefficient value. Generally, the correlation coefficient value will be transformed into the Fisher's Z scale, and the entire analysis will refer to the results of the transformation. The final results, such as summary effects and confidence intervals, can be returned in correlation values to be presented (Borenstein, 2009).

Borenstein (2009) explained how the calculations were carried out in the meta-analysis based on correlation values. In this case, the researcher calculated the variance and standard error of correlation for each research article involved. The variance calculation can be done by utilizing the data on the number of samples ( $n$ ) and the value of the correlation coefficient ( $r$ ). The variance calculation is done, after getting the variance value, the Standard Error (SE) value can be calculated. Calculation of correlation value transformation ( $r$ -to-fisher's Z transformation). After getting the transformation value, it is possible to calculate the variance and SE values and calculate the summary effect size ( $M$ ), Variance ( $VM$ ), and Standard error ( $SEm$ ). Then 95% Confidence Interval (CI), calculations for the lower limit (LL) and upper limit (UL) values are used as a reference.

*Heterogeneity.* The diversity of study results can be influenced by various things such as differences in measurements, differences in sample characteristics, and the number of samples. Meta-analytical research results heterogeneity studies need to be assessed and do not significantly influence effect size. In this meta-analysis, the observation of study diversity in estimating the effect size is actual variance and random error. The heterogeneity study test refers to the Q statistic, between-study variance ( $T2$ ), between-study standard deviation ( $T$ ), and the ratio of true heterogeneity to total observed variation ( $I2$ ) (Borenstein, 2009).  $I2$  values with results of 25%, 50%, and 75% respectively represent small, medium, and significant heterogeneity, so  $I2$  values  $> 75\%$  are included in the large category, and  $p < 0.05$  indicate that the studies involved in this study are significantly heterogeneous. Another parameter that can see is the value of Q-Value. The Q-value of this study is higher than the df value, indicating heterogeneity of the study (Card, 2015).

*Publication bias.* One issue that needs to be a concern in meta-research-analysis is publication bias. It means that there is a tendency for research results that show a large effect size to be published, while the results of research with a standard effect size are not published. Publication bias can impact the conclusion of a meta-analysis study. If the missing study is systematically different from the study obtained in the search, this indicates a bias in the sample of studies involved in meta-analysis research. The analysis approach can be seen from the Forrest plot and funnel plot. If the results of the Forrest plot are not to the left of the value 0, then it can be said that the study lies in the positive area, so in this study, both variables studied have a moderate positive relationship. Meanwhile, the spread in the funnel plot of this study does not form an asymmetric pattern (non-asymmetry) that indicates there is no biased study (Card, 2015). In addition, other criteria used in measuring publication bias include Rosenthal's fail-safe N and Orwin's fail-safe N (Borenstein, 2009). If the calculation score shows that it tends to be close to the value of 0, then it can be said that there is a publication bias so that the meta-analysis results become less accurate (Card, 2015). As for other criteria, namely Kendal Tau and Egger's Regression, if the  $p$ -value  $> 0.05$  indicates no proven existence of publication bias (Card, 2015).

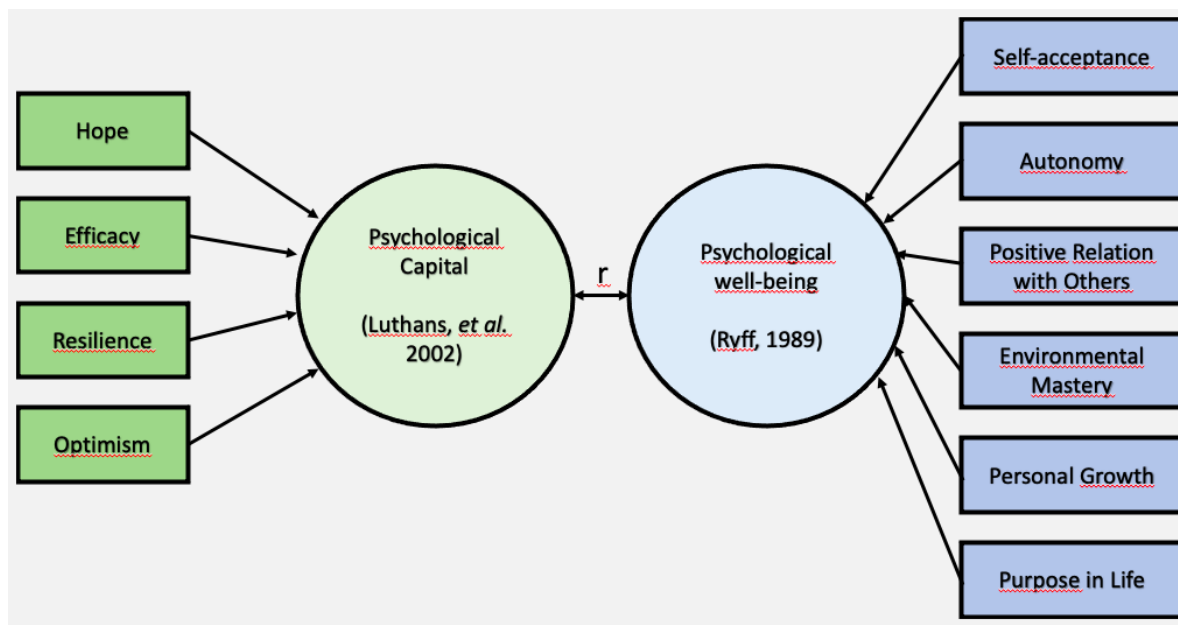
*Risk of Bias.* Risk of bias reporting aims to avoid selection bias, determine random sequences to assign subjects into intervention and control groups, avoid systematic differences between groups, and explain known and unknown roles in a study.



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The protocol reporting the risk of bias is whether specific domains are considered important to be reviewed and incorporate the findings into the analysis. Referring to Cochrane's assessment "Risk of Bias," there are seven types of risk, 3 of which are often used, namely (1) Risk source article; (2) Risk of consistency of methods; (3) Risk of reporting bias. Next for authors' judgment review used: "+" low-risk bias; "x" high risk of bias; "?" unclear. There is also support for judgment, evidence/quotations from papers or other sources, and a review of the author's explanation.

*Data analysis.* It is done using jamovi ver software. 1.8.4.0. Jamovi is an open-source statistical analysis program (The jamovi project, 2021). The analysis for analytical research uses an extra (additional) module, namely the "major" module, which was created to analyze meta-analytical research data.



**Figure 1.** Hypothetical Model of The Relationship between Pscap and PWB.

### 3. RESULTS

Based on the articles involved in this study, the researchers listed the articles by the code name of the author, year, sample, direction of relationship, correlation coefficient (r), SE, Var, Fisher's Z transformation, and Confidence Interval 95%, SE Fisher's Z, and Var Fisher's Z.

#### 3.1 Results of Hypothesis Testing Analysis

The following are the results of the hypothesis testing analysis in this study. It starts with an overview of the results of the summary studies involved in the meta-analysis (Table 1).

**Table 1.** Summary of Articles in Meta-Analysis.

No	Writer's Name	Years	Samples	Relation direction	Correlations (r)	SE	Var	Fisher's Z	CI 95%	SE	Var
1.	Amin & Shah	2020	100	Positive	0.350	0.09	0.008	0.37	[0.17,0.56]	0.10	0.010
2.	Sastaviana	2020	120	Positive	0.605	0.06	0.003	0.70	[0.52,0.88]	0.09	0.009
3.	Li (1)	2018	518	Positive	0.410	0.04	0.001	0.44	[0.35,0.52]	0.04	0.002
4.	Li (2)	2018	469	Positive	0.450	0.04	0.001	0.48	[0.39,0.58]	0.05	0.002
5.	Mishra & Shafiq	2018	76	Positive	0.420	0.10	0.009	0.45	[0.22,0.68]	0.12	0.014
6.	Gibson & Hicks	2018	121	Positive	0.660	0.05	0.003	0.79	[0.61,0.97]	0.09	0.008
7.	Rosalina	2018	196	Positive	0.672	0.04	0.002	0.81	[0.67,0.96]	0.07	0.005
8.	Gyu Park et al.	2016	285	Positive	0.650	0.03	0.001	0.78	[0.66,0.89]	0.06	0.004
9.	Malekitabar et al.	2017	116	Positive	0.418	0.08	0.006	0.45	[0.26,0.63]	0.09	0.009
10.	Rani	2015	375	Positive	0.630	0.03	0.001	0.74	[0.64,0.84]	0.05	0.003
11.	Singh	2015	60	Positive	0.570	0.09	0.008	0.65	[0.39,0.91]	0.13	0.018

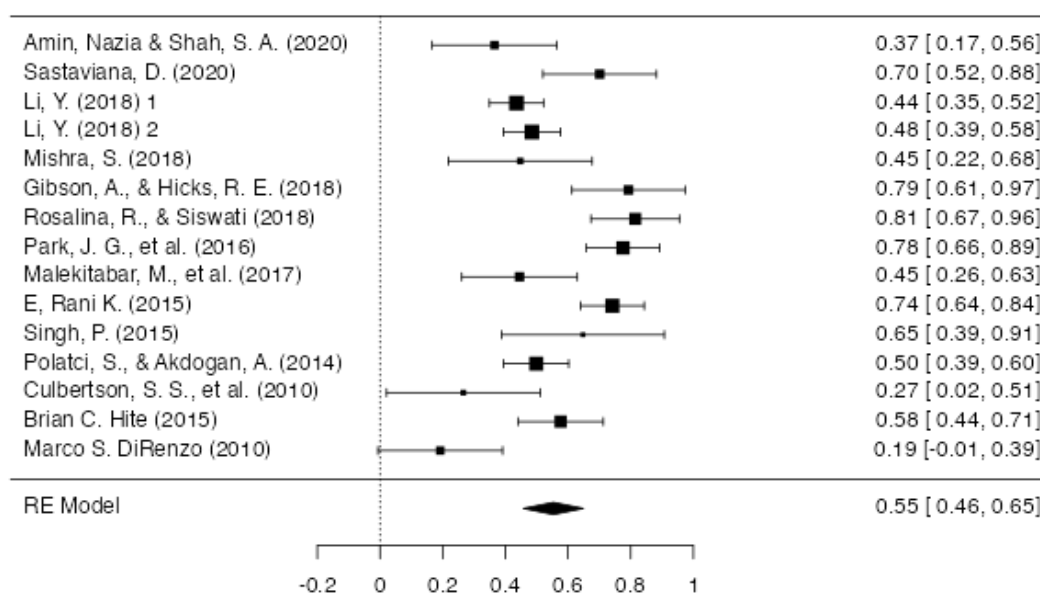
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12.	Polatc Akdoğan	&	2014	361	Positive	0.461	0.04	0.002	0.50	[0.39,0.60]	0.05	0.003
13.	Culbertson et al.		2010	67	Positive	0.260	0.11	0.013	0.27	[0.02,0.51]	0.13	0.016
14.	Brian C. Hite		2015	210	Positive	0.520	0.05	0.003	0.58	[0.44,0.71]	0.069	0.005
15.	Marco DiRenzo	S.	2010	100	Positive	0.190	0.10	0.009	0.19	[-0.01,0.39]	0.101	0.010
Total N						3174						

**Table 2.** Heterogeneity Study.

$I^2$	Q-Value	df	p
85.34%	83.636	14.000	<.001

The heterogeneity study. Results in this study refer to the statistical I2 value (85.34%),  $p < 0.001$ . These results indicate that the studies included in this study were significantly heterogeneous. Another parameter that can be seen is the value of Q-Value. The Q-value of this study is higher than the df value, which indicates the study's heterogeneity (Card, 2015).



**Figure 2.** Forest Plot Meta-Analysis Study

*Forrest Plot.* This research was conducted based on the random-effect model. This is done because, generally, in social research, the characteristics of participants vary, and it cannot be concluded that there is only one actual effect value. Based on the figure in Figure 2, it can be seen that all study results do not touch the value 0 and are in the positive area. Overall, it can be seen that the Fisher's Z correlation value is 0.55, 95% CI [0.46, 0.65]. Significantly, it can be said that the relationship between psychological capital and psychological well-being has a moderate positive effect size.

*Funnel plots* show the overall relationship between studies and the overall effect size. Based on the funnel plots, there was no study analysis bias, and this can be seen from the distribution of study results that do not form an asymmetrical pattern (Card, 2015).

The value of the *Kendal Tau coefficient* can be seen to determine whether there is publication bias in this study. The analysis results show the value of the Kendal tau coefficient = -0.134,  $p > 0.05$ . The insignificant results indicate that there is no publication bias.

*Eagle's Regression Intercept* exhibits a judgmental bias to predict the standardized effect based on precision. In this study it is known that the value = -1.077,  $p > 0.05$ . It indicates a lack of evidence to suggest publication bias.

### 3.2. Additional Analysis Results

The following are the results of the additional analysis in this study. We start by describing the results of the summary studies involved in the meta-analysis (Table 3).

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**Table 3.** Summary of Articles in Meta-Analysis

No	Writer's Name	Years	Sampl n	Relation r	r (PsyCap toward Autonomy)	r (PsyC toward Env. Mastery)	r (PsyCa toward Pos. Growth)	r (PsyCap toward Pur. Life)	r (PsyCa toward Self-Acc)	SE	Var	Fisher's Z	CI 95%	SE	Var	
1.	Rani	2015	375	Positive	0.500	0.439	0.466	0.477	0.476	0.510	0.09	0.008	0.37	[0.17,0.56]	0.100	0.010
2.	Malekitabar	2017	116	Positive	0.033	0.372	0.349	0.418	0.012	0.280	0.06	0.003	0.70	[0.52,0.88]	0.090	0.009
3.	Shakarami	2014	377	Positive	0.390	0.560	0.550	0.340	0.640	0.470	0.04	0.001	0.44	[0.35,0.52]	0.040	0.002
4.	Hernandez	2019	492	Positive	0.480	0.470	0.530	0.480	0.680	0.660	0.04	0.001	0.48	[0.39,0.58]	0.050	0.002
Total N		1360														

**Tables 4.** Summary of Additional Analysis Results

PsyCap towards	Heterogeneity Study				Random Effect Model		Fail safe-N	Kendal Tau		Egger's Intercept	Regression	
	I <sup>2</sup>	Q-Value	df	p	Fisher's Z	CI 95%	Fail safe-N	p	Kendal Tau	p	Egger's Regression Intercept	p
Autonomy	93.71%	26.374	15.905	<.001	0.39	[0.17, 0.61]	340	< 0.001	-0.333	>.005	-4.135	<.001
Env. Mastery	61.41%	7.576	3.000	0.056	-	-	-	-	-	-	-	-
Pers. Growth	58.99%	7.147	3.000	0.067	-	-	-	-	-	-	-	-
Pos. Relat. With Others	59.29%	7.360	3.000	0.061	-	-	-	-	-	-	-	-
Purp. in life	97.6%	72.528	3.000	<.001	0.54	[0.18, 0.89]	683	< 0.001	-1.000	>.005	-4.246	<.001
Self-Acceptance	92.09%	32.645	3.000	<.001	0.55	[0.35, 0.75]	627	< 0.001	-0.667	>.005	-2.322	<.001

The results of the heterogeneity of the study can be seen in Table 4. The heterogeneity study in this study refers to the I2 statistic, the results of PsyCap with autonomy, purposive in life, and self-acceptance are 93.71%, 97.6%, 92.09%, with p < 0.001. These results indicate that the studies included in PsyCap with autonomy, purposive in life, and self-acceptance in this study were heterogeneous. Another parameter that can be seen is the value of Q-Value. The Q-value of this study is higher than the df value, indicating that there is heterogeneity in the study. Furthermore, the results were also obtained from PsyCap with environmental mastery, personal growth, and positive relations with others, namely 61.41%, 58.99%, 59.29%, with p > 0.05, which means that the study is significantly not homogeneous. Therefore, the analysis cannot be continued for PsyCap with environmental mastery, personal growth, and positive relations with others.

*Random-effect model.* Based on the figure in table 2, it can be seen that all study results do not touch the value 0 and are in the positive area. Overall, it can be seen that the Fisher's Z correlation values on psyCap with autonomy, purposive in life, and self-acceptance are 0.39, 0.54, and 0.55, respectively, with 95% CI [0.17, 0.61], [0.18, 0.89, respectively], and [0.35, 0.75]. Significantly, it can be said that the relationship between PsyCap and autonomy, purposive in life, and self-acceptance has a moderate positive effect size.

*Kendal Tau.* The analysis results showed that the value of the tau coefficients for PsyCap with autonomy, purposive in life, and self-acceptance were -0.333, -1.000, and -0.667 with p > 0.05. Insignificant results indicate no publication bias (Card, 2015).

*Eagle's Regression Intercept.* In this study, it is known that the respective values for PsyCap with autonomy, purposive in life, and self-acceptance are -4.135, -4.246, and -2.322 with p < 0.05. It indicates a lack of evidence to suggest publication bias.

## 4. DISCUSSION

The meta-analysis resulted in the findings in the size effect on the relationship between psychological capital and psychological well-being. Based on 15 effect sizes, the average strength of the two variables is r = 0.55, 95% CI [0.46,0.65]. It can be concluded that the relationship between psychological capital and psychological well-being has a moderate positive effect size.

This study's relationship between psychological capital variables and psychological well-being is quite varied. Fisher's Z correlation value of the 15 studies involved ranged from 0.19 to 0.81. It shows that other variables play a role in the relationship between the two variables, one of which can be subject well-being, job satisfaction, the meaning of work, or organizational commitment, or work engagement, which are variables in sensitive psychology (Joo & Lee, 2017; Hansen et al., 2015; Mlangeni & Van Dyk, 2017). The research with the lowest correlation value is research by Marco S. Dizenzo (2010) with a correlation value of 0.19. Research

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conducted by Marco S. Drenzo (2010) involved participants who tended to be few ( $n = 100$ ) and were in one organization. It may affect the conclusion that tends to be less able to describe conditions in the general public. The researchers themselves also revealed that the reliability scores in their studies tended to be low (less than 0.7). It can also cause the variables measured in this study to be inaccurate. This research is unpublished thesis research. Perhaps it is because of this that the research of Marco S. Drenzo (2010) was not published.

The study results with the highest Fisher's Z correlation value were found in a study conducted by Rosalina (2018) with a correlation value of 0.81. This study involved 196 participants. The researchers conducted a random sampling of the research population. It can improve the quality of research results because there is no particular tendency or bias in determining the participants involved in the study. In addition, the reliability value of the measuring instrument used is relatively high, ranging from 0.89 to 0.90. A high-reliability value can indicate a low level of error in the measurement process of each research variable.

The analysis results aimed at knowing the existence of publication bias seen based on the Rosenthal approach showed the number of *missing studies* of 4787 with a value of  $p < 0.001$ . While Orwin's study showed the number of *missing studies* was close to 0, there may be bias in this study, but based on the coefficients of *Kendal Tau* and *Egger's Regression Intercept*. *Kendal Tau* coefficients of  $-0.134$ ,  $p > 0.05$  and *Egger's Regression Intercept*  $-1.077$ ,  $p > 0.05$  indicate no publication bias. Research showing publication bias indicates insignificant results. Therefore, the absence of publication bias proves that the magnitude of psychological capital effect size with *psychological well-being* is significant.

Based on the additional analysis results, it was found that psychological capital was positively related to each dimension of psychological well-being. Of the six dimensions of psychological well-being, the highest result is self-acceptance. It can be because one of the dimensions of PsyCap is self-efficacy, both of which are internal factors of the individual, so the two dimensions have a strong relationship. It is supported by research conducted by Caroli & Sagone (2014), namely when a person increasingly feels himself to be fast in overcoming problems and adapting in everyday life (self-efficacy), then they will be more able to accept various kinds of problems character to himself (self-acceptance).

### 5. CONCLUSIONS

This study provides a brief description of how the effect size between psychological capital variables on psychological well-being. The effect size between psychological capital and psychological well-being is included in the moderate and significant positive groups through the analysis process. Based on the additional analysis results, it was found that psychological capital was positively related to each dimension of psychological well-being. Of the six dimensions of psychological well-being, the highest result is self-acceptance.

### 6. PATENTS

**Author Contributions:** Conceptualization, SYS.; methodology, SYS.; software, SYS.; validation, SYS.; formal analysis, SYS.; investigation, SYS.; resources, SYS.; data curation, SYS.; writing—original draft preparation, SYS.; writing—review and editing, SYS and TSY.; visualization, RA.; supervision, SYS and RA.; project administration, SYS. TYS, and RA; funding acquisition, SYS. All authors have read and agreed to the published version of the manuscript.

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