Meta-Analysis Studies: The Relationship between Social Support and Psychological Well-Being among Adolescents in Indonesia

K. P. Diyana and R. Jatnika

I. INTRODUCTION

Adolescence is a period of frequent transition or transition from childhood to adulthood, also known as the critical period (Hurlock, 2003). According to WHO, adolescents are the population in the age range between 10-19 years. Based on a review of developmental theory, adolescence is a time when rapid changes occur (Gunarsa, 2009). In line with the changes that occur in adolescents, they are also faced with developmental tasks that differ from those in childhood. Individuals have developmental tasks that must be fulfilled. If the tasks are completed successfully, they will then achieve satisfaction, happiness, and acceptance from the environment. If someone fails to carry out the task development at real age, the development on the next stage will experience disruption, which will then trigger problems with adolescents. At this age, adolescents try to find adjustment to their peer groups (Diananda, 2018). During the transition period, adolescents are faced with problems of self-control (Diananda, 2018). Adolescence is also often associated with stereotypes about deviance and impropriety. This can be seen from the number of developmental theories that discuss inconsistencies, emotional disorders, and behavior disorders as a result of the pressures experienced by adolescents due to changes that occur in him/her or as a result of environmental changes.

Psychological well-being is one indicator of individual well-being that is widely used for looking at individual fulfillment of the criteria for positive psychological functioning. In everyday life, people usually call psychological well-being in terms of psychological well-being or happiness. Psychological well-being can be achieved through human efforts because every human being has the same life goal, namely achieving happiness. Ryff (in Simbolon, 2009) explains that happiness is the highest stage that can be achieved in human life; when humans are happy, their life needs are complete. In this research, the term happiness is referred to as psychological well-being.

Psychological well-being (PWB) is one of the areas of general positive psychology that measures functions positively at the individual level (Peyrot et al., 2005). According to Ryff (1989), psychological well-being is defined as the result of an individual’s evaluation or judgment of himself being affected by the life experiences and expectations of the individual concerned and is used to describe health individual psychological function based on the fulfillment of positive psychological functions (positive psychological

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Research has begun to explore the relationship between social support and psychological well-being among adolescents, but the overall relationship remains unclear. This meta-analytical study aims to explore: (1) the overall relationship between social support and psychological well-being, and (2) the moderating variable effect of the relationship between social support and modified psychological well-being. Eleven journals were collected using the PRISMA method and analyzed using Jamovi application for meta-analysis. The results found an overall positive effect with high heterogeneity for the relationship between social support and psychological well-being among adolescents. The effect sizes of the 11 empirical studies ranges from 0 to 1.02. The overall average effect size is medium ($r = 0.58$). The results also show that the heterogeneity of this relationship is high (82.6%). In addition, analysis of moderator indicated the year of publication, subject characteristics, social support measures, and sources of support social relationships related to social support and psychological well-being. Participant’s age and gender or the research design had no influence on the relationship between social support and psychological well-being. Implications and possible applications of the relationship between social support and psychological well-being among adolescents discussed in this article.

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functioning). The teenager successfully fulfilled the stages of development with a positive feeling and was able to fulfill all six criteria of positive psychological well-being can be said to have reached psychological well-being. The six criteria for psychological well-being are: autonomy, environmental control, self-growth, positive relationship with other people, purpose in life, and self-acceptance. This indicates that good psychological well-being in adolescents appears from optimal functioning on these six criteria.

In fact, there are many conditions which describe that psychological well-being has not been achieved well, especially in adolescents. Psychological well-being in adolescents that has not been achieved properly can be seen from the results of a research conducted by Indrawati (2017) on psychological well-being based on emotional intelligence and social support for open junior high school students. In this study, it was found that adolescents were often involved in delinquency such as brawls and truancy during school hours due to lack of psychological well-being. According to Ryff (Fitri et al., 2017), conditions indicating low achievement, self-acceptance, personal growth, and negative feelings in adolescents are categorized as low psychological well-being. Good psychological well-being can help teens to grow positive emotions, feeling of life satisfaction and happiness, and also reduce depression and negative adolescent behavior (Akhtar, 2017).

Psychological well-being is influenced by several factors, namely: demographic factors (age, type gender, socioeconomic status, and culture), social support, evaluation of life experiences, personality, and religiosity (Ryff and Keyes, in Susanti, 2012). The results of Desiningrum’s research in 2010 show that social support from parents gives a high contribution to psychological well-being. This is because the individual feels the family love and accepts himself as he is and can understand deficiencies and his potential advantages. This is also supported by the results of research conducted by Ramadani (2016) that there is a positive relationship between parental social support and psychological well-being of students whose parents are divorced, meaning that the higher the support given by parents, the higher the student’s psychological well-being will be, and vice versa.

The relationship between social support and psychological well-being in adults was studied more than in children and adolescents (Belle, 1989; Dubow & Ullman, 1989; Wolchik et al., 1989). In fact, Belle (1989) states that children and adolescents need social support more than adults. Fortunately, the number of social support studies in children and adolescents has increased in size since the 1980 (Wolchik et al., 1989). Rosenblad (2009) states that the correlation results of the two variables cannot only be based on the results of a single study, because study results vary between one study to another. Therefore, a technique is needed to synthesize data between studies. Narrative reviews have been used for this purpose, but they have high subjectivity (different researchers can make different conclusions) and does not provide benefits because more and more information is available in a variety of ways (Cuijpers, 2016). The result is that many research on the relationship between social support and psychological well-being among adolescents in Indonesia provides different conclusions. Users of research results will question the final results of the research. The final result is an aggregation of the conclusions from these studies. To obtain the results of this conclusion, a systematic method is needed, one of which is meta-analysis (Retnawati, 2018). Other than that, there are many studies on the relationship between social support and psychological well-being among adolescents in Indonesia with a small sample size. It is statistically stated that a larger sample size is expected to give even better results. With a large sample, mean and standard deviations obtained have a high probability of resembling the population mean and standard deviation. This is because the number of samples have something to do with statistical hypothesis testing (Hajar, 1996: 147). Therefore, researchers are interested in doing meta-analysis research with a larger number of samples through the synthesis of research data with different topics.

Meta-analysis for correlation studies is used to look at the relationship between two variables by utilizing the results of previous correlation studies. By carrying out a meta-analysis, it is possible to draw conclusions from various studies of these correlations. In this study, many studies discuss the correlation between social support and psychological well-being of adolescents in Indonesia with various characteristics. Research generally shows that there is a positive correlation between social support and psychological well-being in adolescents (Malecki & Demaray, 2006). However, several studies have found that there is a negative relationship between social support and psychological well-being among adolescents, so that the correlation value is not always positive (Berndt & Ladd, 1989; Barrera et al., 1981). Therefore, although research evidence shows an overall positive correlation between social support and psychological well-being among adolescents, there are still many factors that can be obtained to affect the magnitude of the correlation. When faced with these conditions, it certainly creates confusion to make a conclusion regarding the relationship between social support and psychological well-being of adolescents, because from the results of these studies, some have a positive correlation, and some have a negative correlation. Moreover, the correlation coefficient between social support and psychological well-being among adolescents were also varied. Some are in the low category, medium, and high, causing it a problem to determine the true strength of the correlation between variables. Based on the said description, the researcher is interested in conducting this study.
II. METHODS

A. Literature Search

Research references on social support and psychological well-being are carried out through Google Scholar, Neliti.com, Portal Garuda, and Indonesia ONESEARCH that are subscribed by the Ministry of Research and Technology in Indonesia. The keywords used are correlation research, social support, psychological well-being, and adolescent. For data updates, the references sought are limited from 2010 to 2020. The inclusion criteria of this study are: (1) reporting the correlation coefficient (r); (2) reporting the number of research subjects; and (3) including adolescents as research subjects. Afterwards, researchers have discussed to select the journals based on the inclusion criteria. Based on the inclusion criteria, 11 journals were obtained that met the criteria. The detailed journals can be seen in Table 1.

B. Meta-Analysis Procedure

As explained in the introduction, both the concept of social support and the concept of psychological well-being are broad. Therefore, to see the potential for moderating variables due to the broad concept of each variable, the first step taken by the researcher is to make a categorization about the result of effect size in every research. Afterwards, measure on heterogeneity using the homogeneity statistic Q for selecting fixed or random effects models is conducted. I squared index is also used to see the level of heterogeneity. According to Huedo-Medina et al. (2006), low heterogeneity is indicated by the value of I squared equivalent to 25%, medium heterogeneity is indicated by the value of I squared equivalent to 50%, and high heterogeneity is indicated by the value of I squared equivalent to 75%. Weighted average correlation coefficient (r) is calculated from each study. Besides that, the researcher also calculates 95% confidence intervals. To see the publication bias, the results of fail-safe N are also included. All analyses were performed using Jamovi 0.9.5.12.

III. RESULTS

Data on the relationship between social support and psychological well-being in this study totaled 11 scientific publication articles that match the research criteria that can be analyzed from the 817 articles that have been collected. The research data are as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Author (year)</th>
<th>Total Sample</th>
<th>Gender</th>
<th>Research Subject</th>
<th>Measuring Instrument of Social Support</th>
<th>Sources of Social Support</th>
<th>Measuring Instrument of PWB</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sianturi (2018)</td>
<td>48</td>
<td>Female</td>
<td>Orphanage Teenager</td>
<td>Sarafino Theory (2006)</td>
<td>Friends</td>
<td>Ryff Theory</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td></td>
<td>Multidimensional Scale of Perceived Social Support</td>
<td>Zimet Theory (1998)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Zahra (2017)</td>
<td>141</td>
<td>Female</td>
<td>Convict Teenager in LPKA</td>
<td>The Social Provision Scale of Weiss Theory (2014)</td>
<td>Friends, friends, special person</td>
<td>Ryff Theory</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td></td>
<td>Sarafino Theory (2006)</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>Sarason Theory (1983)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Prayogi et al. (2017)</td>
<td>392</td>
<td>Female</td>
<td>SMK Students</td>
<td>Sarason Theory (1983)</td>
<td>Parental Involvement Scale of PWB (Cohen, 1995)</td>
<td>Family and Friends</td>
<td>Ryff Theory</td>
</tr>
<tr>
<td>7</td>
<td>Novita et al. (2017)</td>
<td>32</td>
<td>Female</td>
<td>Sexual Abuse Victim</td>
<td>House Theory (Cohen and Syme, 1995)</td>
<td>Parental Involvement Scale of PWB (Cohen, 1995)</td>
<td>Family and Friends</td>
<td>Ryff Theory</td>
</tr>
<tr>
<td>8</td>
<td>Paramhita (2018)</td>
<td>157</td>
<td>Female</td>
<td>Orphanage Teenager</td>
<td>House Theory (Cohen and Syme, 1995)</td>
<td>Parental Involvement Scale of PWB (Cohen, 1995)</td>
<td>Caregiver</td>
<td>Ryff Theory</td>
</tr>
</tbody>
</table>
From the calculation, the total effect size is 0.58 in the large category. Based on calculations using Jamovi application, the correlation effect between social support and psychological well-being was positive ($\beta = 0.580; \ p <0.001; [95\% \text{ CI}] = 0.439 - 0.723$). The variation between studies also showed relevant results ($T^2 = 4.40\%$) with high heterogeneity ($I^2 = 82.60\%$). The Fail-Safe N test shows a large sample size to change the effect to no statistically significant ($n = 1314.00; \ p <0.001$). Based on Fig. 1, Paramhita (2018) has the highest effect ($\beta = 1.02$), while Maurizka’s (2019) study appeared with the lowest effect ($\beta = 0.34$). Basically, all studies showed a positive correlation between social support and psychological well-being. Langi (2015) and Sianturi (2018) study contributed the same value from the model composition ($\beta = 0.34$). The overall effect of the relationship between social support and psychological well-being ($\beta = 0.580$) ended with a wide confidence interval $[95\% \text{ CI} = 0.439 - 0.723]$ for estimation. Therefore, studies with effects that are lower or higher than CI are contributing to this. The Funnel Plot asymmetry statistical model can be seen below:

Next, researchers explored the moderators on the correlation between social support and psychological well-being since moderator analysis is suitable for models with high heterogeneity (Rosenthal & DiMatteo, 2001). Researched moderators are as follows: (a) publication year; (b) age; (c) gender; (d) the characteristics of the research subject; (e) location research; (f) social support measures; and (g) sources of social support. Some variables do not show moderation that is statistically significant ($p > 0.05$) or improvement for the general model. However, researchers found a moderating effect taking into account several variables, namely the year of writing, the characteristics of the research subject, the support measures social, and a
source of social support.

IV. DISCUSSION

This meta-analysis explores the relationship between social support and psychological well-being on teenagers. The results indicate that social support and psychological well-being have a positive association with a significant effect size value. The research findings reveal that overall, the average correlation between social support and psychological well-being was 0.58. These results are in line with research conducted by Desiningrum (2010) which shows that social support is positively correlated with and contributes significantly on psychological well-being. Individuals feel happy when their family and people love and accept himself as he is and can understand the strengths and weaknesses of his potential. This is supported too with the research results conducted by Ramadani (2016), which shows that there is a positive relationship between people’s social support parents with the psychological well-being of students whose parents are divorced. This means that the higher the support of the parents given, the higher the student’s psychological well-being, and vice versa.

According to Anandari (2013), social support from parents, friends, and the environment feels like they are accepted or feeling loved is an important part of one’s psychological well-being. The role of parents is crucial in the development process that occurs in adolescence. A close relationship with parents also plays an important role for adolescent development because the relationship between parents and children will affect adolescent interpersonal relationships. For most children, early family relationships can provide the support needed to engage effectively in the world of peers, which in turn will provide a broad and complex foundation for its intertwining relationships with peers (Santrock, 2007). Widiatmoko (2016) argues that a good family function will have a positive impact on the psychological well-being of a teenager. This is supported by research conducted by Emadpoor et al. (2015) who also conducted related research social support relationship and psychological well-being. It is known from this research that social support is felt directly and positively from family, friends, and significant others, which can influence the psychological well-being and affect students’ academic motivation. Moderator analysis is suitable for a model with high heterogeneity, as displayed in this study (Rosenthal & DiMatteo, 2001). The moderators studied were the year of publication, age, gender, characteristics of research subject, research locations, social support measures, and social support sources. Some of the variables do not show significance statistically (p > .05) on moderation or improvement for the general model. However, researchers found an effect moderation by considering several variables, namely: the year of writing, the characteristics of the research subject, the measuring instrument social support, and a source of social support. The first moderator variables were analyzed, and their results significantly affected the relationship between social support and psychological well-being of adolescents in Indonesia in the year of publication. Effect size increases as the year the publication of new studies shows that there is an increase in the quality of research from year to year on the topic of the relationship between social support and psychological well-being of adolescents in Indonesia. This is in line with the research results from Wolchik, Beals, & Sandler (1989) which states that the number and the quality of social support research in children and adolescents has increased substantially since the 1980s.

Furthermore, the characteristics of research subjects mean the specific characteristics of the research sample of each study analyzed in this meta-analysis. In this study, the characteristics of the subjects varied and this affects the psychological well-being of adolescents. Research by Ryff et al. (1999) explains that characteristics of research subjects, including socioeconomic status, includes education level, given its own influence on psychological well-being, where individuals with high educational levels will indicate a higher level of psychological well-being (in Snyder & Lopez, 2002). Ryff (1999) also explains that economic status is related to the dimensions of self-acceptance, inner goals life, environmental control, and personal growth. These results are in line with the characteristics possessed by individuals, which will have a different effect on one’s psychological well-being. Social support measures also have a significant effect on increasing the relationship between social support and psychological well-being of adolescents in Indonesia: Measuring instruments with the theory of Sarafino (2011) as the most used theory in this study describes four types of social support, namely: emotional support, informational, rewarding, and instrumental. The results of the analysis also reveal that perceived social support in Zahra’s research (2017) is strongly related to psychological well-being than other types of measurement which supports the research results suggested by Cohen & Wills (1985). In addition, the support received (received social support) is not as beneficial as perceived social support. This was explained by Taylor et al. (2004) that when someone receives real support from others (received social support), it will reduce the price, especially if they receive support that may not really be needed, or in fact, that may seem annoying. These factors can cause stress in an individual receive support and therefore can explain why received social support is not closely related to psychological well-being. In terms of sources of social support, support from family has the strongest
relationship with adolescents among other sources, meaning that support from the family can increase the psychological well-being of adolescents in Indonesia. This is in line with the research results by Desiningrum (2010) which shows that social support from parents makes high contribution to psychological well-being. This is because the individual feels that the family loves and accepts himself as he is and can understand the strengths and weaknesses of his potential. For most children, early family relationships can provide the needed support to engage effectively in the world of peers, which in turn will provide a foundation for its intertwining relationships with peers which are broad and complex (Santrock, 2007). Widiatmoko (2016) also supports the previous statement by arguing that family functions are good and that it will have a positive impact on a teenager’s psychological well-being. That too is supported by research conducted by Emadpoor et al. (2015), relating to social support relationships and psychological well-being. It is known from this research that social support is felt directly and positively from various sources, one of which is family, that can affect the psychological well-being and have an effect on students’ academic motivation. Many studies show the importance of deep parental support in adolescent development (Zahra, 2017; Sitio, 2019; Langi, 2015; Prayogi, et al., 2017; Novita, et al., 2017). Yet, some studies have found that support from friends has the weakest relationship, meaning that support from friends can increase the psychological well-being among adolescents in Indonesia. Researchers assume that it may be because friends are the only source of support youth can choose for themselves. Therefore, adolescents with the same characteristics, be it good or bad characteristics, tend to associate each other (Erdley, Nangle, Newman, & Carpenter, 2001) and are thus more likely to encourage one another on the quality they share. For example, an aggressive child tends to choose aggressive friends (Zahra, 2017; Earls, Cairns, & Mercy, 1993). As a result, aggressive behavior can be magnified, and the psychological well-being is reduced. Future research should study whether the magnifying effect of the characteristics is associated with this mismatch. This explains the weaker relationship between support from friends and psychological well-being or other important factors. In addition to the above variables that have a significant effect on the relationship between social support and psychological well-being among adolescents in Indonesia, there are variables which apparently have no significant effect, namely gender and age. Many studies state that gender is one of the factors affecting psychological well-being. Women tend to have more psychological well-being than men. This is associated with a mindset that influences the stress-coping strategies done, as well as social activities undertaken. Furthermore, women have better interpersonal skills than men (Ryff & Singer). Other than that, women are more able to express emotions by telling stories to others and are happier to build social relationships than men. Women score higher on the dimensions of positive relationships with others (Ryff & Keyes, 1995). However, in the study, there was no gender variable effect. The same thing occurs with age variable. Ryff & Keyes (in Ryff & Keyes, 1995; Snyder & Lopez, 2002) explains that there are differences in psychological well-being levels based on differences in age. However, in the research, no effect was found from the influence of the age variable. The researcher states that further research is needed regarding this result.

V. CONCLUSION

Based on the findings and analysis of the research results that have been carried out, it can be concluded that: (1) retained earnings of social support has a positive correlation with psychological well-being with a large correlation (effect size) of 0.58, and (2) there are 4 moderating variables that influence the relationship between social support and psychological well-being, namely: the year of writing, the characteristics of the research subject, measuring tools for social support, and social support sources. After the researcher carried out the meta-analysis research process, we came up with the following suggestions as an improvement in the future: (1) increase the number of journals/research articles so that exploration of more data can be done, (2) conduct meta-analysis research procedures with more attention to systematics PRISMA research, and (3) for researchers, a researcher needs to be more detailed in including the completeness of the data research for scientific articles for the methods, sample data, and research data.

VI. FUTURE RESEARCH

The broad concept of psychological well-being can be realized in the realm of affection and behavior. This will have an impact on the variety of measuring instruments used so that the results are heterogeneous. Future studies can focus on the psychological realm of the intended psychological well-being. Another thing is that various methods of the journal study object from the point of view of adolescents and parents can provide different interpretations. Further research can focus on solely one source of data collection. For more valid results, efforts are needed from the research team to provide an assessment of each of the quality of the journal.
REFERENCES


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