NO DIFFERENCES OF ADOLESCENTS’ HOPE IN TERMS OF DEVELOPMENTAL PHASES AND GENDER

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ABSTRACT

The research aimed to investigate the differences in adolescents’ hope based on developmental phases (age) and gender. Hope, as one of the positive emotional resources, is essential for adolescents in performing psychosocial adaptations. There were still inconsistent results from several studies regarding differences in the level of hope in adolescence based on age and gender, which suggested the need for further investigation. This cross-sectional research involved 400 female and male adolescents who were attending junior and senior high schools with an age range between 13-20 years (M age= 16.04 years, 84% females and 16% males). Data were collected using Snyder’s Hope Scale, which was distributed to respondents through online Google Forms. The collected data were analyzed using the t-test techniques. The results show that most adolescents (45.8%) are in the very high category of hope. Further, the results also indicate that there is no significant difference in hope between early and late adolescents, as well as between girls and boys. This implies that interventions to improve adolescents’ hope can be carried out without paying attention to these demographic variables. Limitations and suggestions for future research related to the results are also discussed.

Keywords: adolescent, hope, developmental phases, gender

INTRODUCTION

Adolescence is viewed as a unique and critical period of development because there are many drastic biological, emotional, and social changes during this period. When experiencing development, adolescents may face many problems, including conflict and tension caused by societal demands. The psychosocial adjustment process in which a person adapts to the demands of society produces a state of tension named psychosocial crisis (Newman & Newman, 2020). During adolescence, this psychosocial crisis refers to ‘personal identity vs. identity confusion’, a stage in which adolescents need to reconceptualize their self-concept, reidentify the meaning of life, reidentify abilities and skills they possess, and reset future goals which further guide their transition into adulthood (Newman & Newman, 2020). Achieving personal identity requires a reconceptualization of adolescents’ self-concept, including integrating past identifications, current abilities, and goals for the future (Newman & Newman, 2020). This crisis must be resolved before reaching the next stage of development.

Amid this crisis in facing developmental tasks, hope can be a positive emotional resource for psychosocial adjustment because it has been recognized as an important coping resource for both healthy people (Marciano et al., 2022) and those who are sick (Chan, Wong, & Lee, 2019; Hellman et al., 2018). Furthermore, by having hope, adolescents believe there is a positive future for themselves and others (Krafft, Guse, & Maree, 2020; Packer et al., 2020). Therefore, building hope in adolescents can help them face and solve problems, both problems related to their developmental tasks and other problems in their lives.

Given the importance of interventions on hope in adolescents who are undergoing the process of completing developmental tasks, variables that are related to hope have to be investigated as well,
including demographic variables. It is known that several demographic variables correlate with hope, such as age and gender (Ciçek, 2021; Hassan et al., 2018; Wikström, Lorentzen, & Lorentzen, 2018).

With regard to the developmental phase or age, it is known that experts in child development tend to describe adolescence as a period that starts with early adolescence at 10-12 years of age and ends with late adolescence at 18-21 years of age. In early adolescence, individuals are generally still in junior high school and experience many puberty changes. At the same time, late adolescence starts from the middle of the second decade of human life (16-20 years), where they begin to focus on career, dating, and exploration of self-identity (Santrock, 2020). Differences in orientation in the early and late stages of adolescence can result in differences in the characteristics of adolescents, including hope, which is supported by research findings that found a positive correlation between hope and age (Marques & Gallagher, 2017).

Another research by Newman and Newman (1975) has also distinguished adolescence into early adolescence (13-17 years) with the tasks of developing physical maturity, formal operations, membership in peer groups, and heterosexual relationships, while late adolescence (18-22 years) with the development tasks of achieving independence from parents, gender role identity, internalized morality, and career choice.

Venning et al. (2020) have found a positive correlation between hope and age, meaning that hope increases with age in healthy adolescents. Likewise, the research results of Baptista, Borges, & Serpa (2017) have shown that adolescents have higher levels of hope than children. Meanwhile, with a sample of adolescent respondents, Warren, Jackson, and Sifers (2020) have found no positive relationship between hope and age.

While concerning gender, the research results of Baptista, Borges, & Serpa (2017) with adolescents aged 12-17 years have shown that girls have higher levels of hope than boys. The same trend is found in adolescents aged 17-21, where girls are more hopeful than boys (Hassan et al., 2018). The opposite results are found in the research of Ghosh, Taj, and Periasamy (2020), Esteban-Gonzalo et al. (2020), and Venning et al. (2020), where boys are more hopeful than girls.

The inconsistent findings of studies on hope in relation to age and gender in adolescents make a clear need to carry out further research in the same field with research samples from different cultural contexts; this research consists of 400 adolescents who were pursuing junior and senior high school education in Yogyakarta, Indonesia. This is in line with what Arnett (as cited in Reese, Rosenmann, & Cameron, 2019) has stated that the awareness of globalization has led to increased attention to better understand human behavior more broadly from different cultural backgrounds, as shown by the studies of Ozer (2019). It is expected that the results of this research will have implications for planning interventions on hope in adolescents according to their developmental stage and gender.

Based on the literature review and previous research results, it can be concluded that hope is essential for adolescents as a resource of positive emotions to overcome the many challenges that need to be resolved in carrying out developmental tasks in adolescence. Demographic variables, especially age and gender, associated with hope exhibited inconsistent research results, even though knowledge of this issue based on research findings is crucial for strategic development in intervention in increasing adolescent hope. Therefore, the research questions are formulated as follows: (1) What is adolescents’ hope level? (2) Are there differences in hope in adolescence in terms of development phases (age) and gender among adolescents aged 13-20 years?

METHODS

The research applies a quantitative approach with survey design and is carried out in Yogyakarta municipality, Special Region of Yogyakarta, Indonesia. The population of the research is 185,224 students comprised of junior high school and senior high school students in the Special Region of Yogyakarta Province (BAPPEDA DIY, 2019). An accidental sampling method is employed since the inclusion criteria have been stated when describing the population, which are junior and senior high school students aged 13 to 20. The data are collected using Google Form via the Internet.

The sample is made up of 400 adolescents who are attending junior and senior high schools in the city of Yogyakarta. They are aged between 13-20 years, with an average age of 16.04. In determining sample size, the researchers use Slovin’s formula with 95% confidence intervals; thus, the obtained sample is 400 people.

The researchers first target the research subjects through school, with early adolescence represented by junior high school students and late adolescence represented by high school students. In collecting the data, the researchers ask for permission from the school. After obtaining permission, the researchers send a research instrument link to the counselor of the participating school, which is further forwarded to their students.

The participants are asked to provide written informant consent stating their willingness to participate in the research. Further, the research is approved by the researchers’ university. Based on the theory of Santrock (2020), the sample in the research consists of 17.40% of early adolescents (13-15 years) and 82.60% of late adolescents (16-20 years). Among the participants, 84% are girls, and 16% are boys.

The research uses Snyder’s Hope Scale (SHS) as an instrument to measure adolescents’ hope. Data collection are done using an online tool, Google Forms, to facilitate the distribution and to fill out the instrument. Snyder’s hope scale is a hope
measurement instrument developed from the concept of hope stipulated by Snyder et al. (1991). Snyder et al. (1991) have defined hope as a cognitive pattern that results from a reciprocal sense of success from (a) agency success, where agency here refers to a sense of confidence to succeed in meeting goals either in the past, present or future, and (b) availability of successful pathways associated with goals, where the path components refer to a sense of being able to produce plans that successfully meet the goals.

Snyder’s hope scale is made of 12 items consisting of four items that measure agency, four items that measure the pathways, and four items that are fillers. This scale has convergent validity with the Life Orientation Test (0.50-0.60, p<0.005) and with the Generalized Expectancy for Success Scale (0.54-0.55, p<0.005). In addition to validity, internal consistency reliability shows a range of estimates for Cronbach’s alpha from 0.74 to 0.84, and the temporal reliability shows a test-retest reliability of 0.85, p<0.001 (3-week interval); 0.73, p < 0.001, (8-week interval); and 0.76 and 0.82, p < 0.001 (10-week interval). All of these together show that Snyder’s hope scale meets the psychometric properties, making it a good scale.

For descriptive statistics, to categorize the level of hope, a hypothetical categorization process is used, as suggested by Snyder et al. (1991) with the formula proposed by Azwar (2019) (see Table 1).

### Table 1 The Formula Used for Categorization

<table>
<thead>
<tr>
<th>Categorization Formulas</th>
<th>Hypothetical Categorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low (X ≤ μ - 1.5σ)</td>
<td>Very Low (X ≤ 13,00)</td>
</tr>
<tr>
<td>Low (μ - 1.5σ &lt; X ≤ μ -0.5σ)</td>
<td>Low (13,00 &lt; X ≤ 17,67)</td>
</tr>
<tr>
<td>Medium (μ - 0.5σ &lt; X ≤ μ + 0,5σ)</td>
<td>Medium (17,67 &lt; X ≤ 22,34)</td>
</tr>
<tr>
<td>High (μ + 0.5σ &lt; X ≤ μ + 1,5σ)</td>
<td>High (22,34 &lt; X ≤ 27,01)</td>
</tr>
<tr>
<td>Very High (X&gt; μ + 1,5σ)</td>
<td>Very High (X&gt; 27,01)</td>
</tr>
</tbody>
</table>

*The categorization based on a formula proposed by Azwar (2019)*

The data analysis process is carried out using IBM SPSS Statistics version 23. First, Little’s MCAR test is performed to check missing data. The analysis results show the pattern data missing completely at random (χ² = 289.53 DF = 261, p> 0.05), so the analysis could be done with all data. Missing data are automatically excluded from the analysis through case deletion.

The Shapiro-Wilk test shows that the hope variable is not normally distributed (see Table 2). Therefore, the analysis uses the bootstrapping method, as Pek, Wong, & Wong (2018) suggested. Bootstrapping is done using the 95% Bias-corrected accelerated (BCa) method of 2000 resampling. The BCa method generates a random sample that replaces the sample from the researcher’s dataset and calculates the accuracy of the sample generated through resampling. The researchers chose the BCa method because this method produces smaller coverage errors than the percentile method (Carpenter & Bithell, 2000). In the multivariate regression assumption test process, no multicollinearity and heteroscedasticity are found.

Descriptive analysis is carried out to get a picture of the level of adolescents’ hope. Furthermore, independent t-tests are performed to analyze the differences in hope between development stages and between gender.

### RESULTS AND DISCUSSIONS

Based on the results of data analysis, descriptive statistics are presented as a categorization of hope levels. The statistical test results of differences in hope are based on developmental phase (age) and gender. Table 2 shows the results of descriptive statistical analysis for the hope variable.

### Table 2 Results of Descriptive Statistical Analysis for the Hope Variable

<table>
<thead>
<tr>
<th>Hope</th>
<th>Mean</th>
<th>SD</th>
<th>Shapiro-Wilk</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>47,40</td>
<td>9.61</td>
<td>0.89</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results of data analysis show a mean of hope = 47.40 with SD = 9.61. Using the categorization formula based on the hypothetical mean and SD (Azwar, 2019), the results of the categorization of hope obtained are presented in Table 3.

Based on the results in Table 2, the mean of adolescents’ hope (µ) is 47.4, and the empirical mean is in the +2 SD range of the hypothetical mean. The hypothetical mean (µ) for hope is 36 with the hypothetical SD (σ) of 9.33.

Based on the results in Table 3, adolescents in the very low category are as high as 14 (3.5%); in the low category are 42 (10.5%); in the medium category are 42 (10.5%); in the high category 144 (36%), and in the very high category 183 (45.8%). Thus, the majority of adolescents have a very high level of hope (see Figure 1).

The stages of adolescent development in the research are divided into (1) early adolescence (13-15 years) and (2) late adolescence (16-20 years). The results of the t-test on hope between the two groups are displayed in Table 4.

The findings of the t-test analysis between the hope of early adolescents and late adolescents (see Table 4) are as follows: t (377) = 0.68, p > 0.05, 95%
CI [-1.55, 3.17]. Thus, it can be concluded that there is no significant difference in hope between early adolescence and late adolescence. Adolescents in the research are also differentiated based on gender, namely girls and boys. The results of the t-test on hope of the two groups can be found in Table 5.

The findings of the t-test analysis of hope between girls and boys (see Table 5) are: \( t(398) = -1.44, p > 0.05, 95\% \text{ CI [-5.51, 1.04]} \). Thus, it can be concluded that there is no significant difference in hope between girls and boys.

The results of the descriptive analysis show that the majority of adolescents are in the very high category. A previous study involving high-risk adolescents, those with physical health problems or social behavior problems also shows similar results. The majority of adolescents have a high level of hope (54.7%) even though they have experience health problems or social behavior problems (Pratiwi, 2019).

Taken from the developmental process, children in adolescence experience a peak in cognitive development, which allows adolescents to plan and think more abstractly (Santrock, 2020). Besides that, egocentric thoughts decrease. The characteristics of...
this propositional thinking ability become logical when associated with pathways to hope, where adolescents are able to combine various alternatives in strategies to formulate their hope which further affects their future life. It can be concluded that thinking about the future, often categorized with hope and optimism (Bamford & Lagattuta, 2020), has an inseparable relationship with the ability to think abstractly, which is prominent in adolescence.

Adolescents are, therefore, able to make inferences about situations and hypothetical situations about the world. This higher thinking provides them with the ability to plan for the future, make alternatives, and to make personal goals. Despite the cognitive individual differences, these new abilities allow them to make introspections and mature decision-making, things they could not do before.

Based on the results of data analysis, the research suggests that there is no significant difference in hope based on adolescents’ development phase, meaning that the hope level of early adolescents is as high as that of late adolescents. This result contradicts the research of Baptista, Borges, and Serpa (2017) and Venning et al. (2020), which have found that there is a positive association between hope and age, but is in line with and strengthens the research results of Marques and Gallagher (2017) and Warren, Jackson, and Sifers (2020) that indicate that there is no positive association between hope and age. In other words, there is no difference in adolescents’ hope in terms of their age. This is contrary to the view of Hinds and Gattuso (1991) that changes in adolescents’ hope can occur from time to time due to developmental changes in both biological and psychological aspects.

It is possible that the present research could not accurately record the changes that occur from time to time because it is conducted cross-sectionally. In addition, the sample is made up of a disproportionate number of early and late adolescents because data collection is taken by purposive sampling through the online method with Google Forms. So even though the analysis is carried out bootstrapping for resampling until the data reaches normal distribution, there might still be possible bias with hope data based on the developmental stage.

The research has also found no significant difference in hope between girls and boys. This result contradicts previous findings, which reported that there are significant differences in the level of hope in terms of gender (Ghosh, Taj, & Periasamy, 2020). It is found that males score higher in hope than females in agency and pathway. Likewise, research by Venning et al. (2020) has found significant differences in the level of hope regarding gender, with boys having higher hope than girls.

The findings of the research can be explained. According to Warren, Jackson, and Sifers (2020), when coping with stress conditions, both males and females share the same predictors of hope, namely emotional support such as connectedness, reassurance, and opportunities for nurturance. In contrast, the results of previous research indicate that males prefer to do activities with their peers and are less likely to seek emotional support in their social networks than females (McKenzie et al., 2018). This is probably caused by the fact that the data on hope among adolescent respondents was taken during the pandemic in July 2020 when in Indonesia, starting in March, the government implemented online learning and social distancing policy. Practically for four months, adolescents have mostly stayed at home carrying out both learning and social activities online. Therefore, it is not surprising that they were likely to be under high pressure, so both girls and boys tended to seek social support to build their hope. This trend is also likely to result in no difference in hope among adolescents in terms of gender because during the pandemic, they experienced the same source of hope, namely emotional support from their social network.

The research also has limitations. Since the research is conducted during the pandemic, the data collection is carried out online via Google Forms with specific criteria or non-random sampling. This non-random sampling technique makes it impossible to control the proportion of balanced sample size between the sub-group of early adolescents and late adolescents, as well as the sub-group of female adolescents and male adolescents. This limitation may have allowed bias in data in the sub-groups with a small number of respondents, namely the early adolescent sub-group and the male adolescent sub-group. Therefore, the accuracy of the results of the research has to be tested again with the number of samples determined randomly so that the number of sub-groups being compared is proportional. Despite these limitations, the tentative results of the research provide helpful information on adolescents’ hope based on demographic variables.

CONCLUSIONS

Based on the results of the research, it can be concluded that adolescents have a very high level of hope. Between early and late adolescence, there is no significant difference in hope, which is the case between gender groups, meaning that there is no difference in hope between boys and girls.

The results of the research imply that in order to provide intervention to improve hope in adolescence, practitioners do not need to pay much attention to adolescent demographic factors such as age and gender, but it is sufficient to focus on the content of hope itself, namely goal achievement orientation through the creation of pathways and agency activation.

The results of the research will enrich the reference in Developmental Psychology, especially regarding the data of adolescent hope related to demographic one, i.e., gender and stage of development. Future research may replicate the research in a different geographical context and use a number of samples that are determined randomly to
improve the accuracy of the results of such a study.

REFERENCES


