Development of Academic Optimism Model in Learning for Junior High School Students

Vivi Ratnawati, Punaji Setyosari, M. Ramli, Adi Atmoko
Universitas Negeri Malang, INDONESIA

Abstract: Academic optimism has an essential role in the adjustment of students in school. This study aimed to examine a model of academic optimism formed from democratic parenting, school climate, internal locus of control, and students’ self-concept. This cross-sectional non-experimental design research design involved 335 Junior High School students in Kediri. The data collection tool was a scale while the data analysis technique was Structural Equation Modeling (SEM) analysis. The results showed that the theoretical model for developing academic optimism in Junior High School students was in line with the research data and obtained empirical support ($X^2 = 246.056 < 255.6018; p = 0.110 > 0.05$), so this model is feasible and can be used in samples that have been studied. In general, this study adds knowledge about positive psychology studies and supports democratic parenting, school climate, self-concept, and internal locus of control as ultimate factors for creating students’ academic optimism.

Keywords: Academic optimism, democratic parenting, school climate, internal locus of control, self-concept.


Introduction

Students who are at Junior High School level can be categorized as adolescence. The teenage phase is required to adapt to the surrounding environment and be able to perform behavior that can support all actions taken by adolescents in the future. Individuals who obtain basic needs such as physiological and psychological needs, so these individuals can develop beliefs that can provide stimuli to balance personalities such as self-confidence, self-concept, self-esteem, and social acceptance (Santrock, 2002). On the contrary, the social environment which is less responsive to individuals’ needs causes the individuals to develop a lack of trust in their social environment. Therefore, individuals who believe in their social environment are characterized by an optimistic attitude, always thinking positively, confident, and believing in their success in the future (Hecht, 2013).

Optimism is a factor that plays a role in supporting achievement motivation and academic achievement. Low optimism in students is characterized by poor communication between students and teachers, feeling depression, low learning achievement, and students often committing school violations which have an impact on low self-esteem (Schumacher, 2006). Schumacher's statement supported by the statement of Wardani and Sugiharto (2020), who stated that the decline in students’ optimistic attitudes in the academic field impacts the students’ success. Students who tend to be pessimistic will find it difficult to explore their potential and do not enthusiastic to reach their goals. Students who tend to be pessimistic will find it difficult to explore their potential and do not have the enthusiasm to reach their goals.

The results of research in Indonesia on academic optimism, as reported by Retno et al. (2014) on high school students, showed that students who had low mathematics scores were pessimistic about their abilities and then discouraged themselves from not doing their assignments and they cheated. Conversely, optimistic students had imagined their success and showed an unyielding attitude to get good scores. However, the results of the research reported by Wardani and Sugiharto (2020) indicate that the level of academic optimism in students is in the moderate category, in which it has a significant correlation to social support and adversity quotient so that when students face various difficult conditions, support is needed from homeroom teacher. The implication is that school counselors must provide

© 2021 The Author(s). Open Access - This article is under the CC BY license (https://creativecommons.org/licenses/by/4.0/).
Based on a preliminary study conducted through observations and interviews conducted by researchers with school counselors at three public Junior High Schools, namely at SMP Negeri 2 Kediri, SMP Negeri 5 Kediri, and at SMP Negeri 7 Kediri, it can be reported that some students have an indication of feeling low optimistic. It comes from academic procrastination, lack of confidence, habit of cheating, not being enthusiastic in learning, low learning achievement scores, and lack of achievement motivation in the academic field. Those are because students have low self-esteem of achievement motivation and are less enthusiastic in learning. Based on the results of interviews with students, some students were less enthusiastic about learning since they felt they do not believe in their abilities, resulting in decreased effort in learning. The results of interviews with the teacher also showed that some students had scores below the minimum completeness criteria, which had consequences for low optimism. Academic problems with poor scores are due to internal issues experienced by students, for example, students' unhappiness due to fear of punishment or not completing the assigned task. Teachers feel that they have tried in various ways to prepare their students well with all their abilities, both with a personal approach and an academic approach, however, there is no fundamental change in students. The results of this preliminary research are in line with the research results reported by Lestari as cited by Indarhadi (2017) that 62.5% of students have low optimism in the academic field. This description shows a symptom of low academic optimism in students, which demands immediate research and ways to solve the problems so that learning objectives can be achieved.

Academic optimism is a positive individual belief and belief for success academically. This personal belief has expectations of student success and motivation (Oludipe & Dixon, 2020). Academic optimism was first presented by Hoy et al. (2006), who argue that academic optimism from time to time-based on humanistic psychology is one of the most critical components of positive psychology and uses the foundation of social cognitive theory. Since Hoy et al. (2006) published their findings on academic optimism, quite a number of other researchers have conducted research on the same theme in America, Australia, Africa, Taiwan, Turkey, Korea, Pakistan, Nigeria, and Iran. These studies also develop a construct of academic optimism by relating it to other variables, such as school (Hasanvand et al., 2013; Mcguigan & hoy, 2006), teacher organizational behavior (Wagner & Dipaola, 2011), community involvement (Kirby & DiPaola, 2011), collective responsibility (Wu, 2013), prospective teacher’s future time perspective and professional plans (Eren, 2012). On the other hand, academic optimism is associated with academic conflict (Gholampour et al., 2019); academic achievement (Ahmadi et al., 2020), and basic psychological needs in self-determination theory (Ryan & Deci, 2020).

Literature Review

Optimism could be a need that people use as self-defense to protect themselves from life’s difficulties. Optimists tend to be combative personalities (Tarhan, 2015). Studies on academic optimism are critical and strategic to be carried out immediately. Suppose academic optimism is ignored for an extended period. In that case, it will negatively impact the school’s image, especially for certain public schools that consider the competence of the teachers to be unprofessional and unable to develop students’ academic optimism in schools. According to Adilia (2010), low optimism or pessimism is a problem that mainly affects students in the school environment, friendships, careers, and family relationships. Suppose a student has a tendency to think pessimistic and is not immediately addressed. In that case, it will threaten the orientation of the student that he is consistently failed, which can cause problems and interfere with learning in school (Peterson & Steen, 2012).

Along with efforts to develop students’ academic optimism, it is necessary to explore contributing factors. Internal factors that are suspected to influence academic optimism are the internal locus of control and self-concept. Locus of control is an individual’s belief that the events in his life are determined primarily by his abilities (Robbins & Judge, 2013). According to Bartal, Bar-Zohar, and Chen as cited by Anggraini and Marwan (2020), individuals who have an internal locus of control will be more active in seeking, processing, and utilizing various information as having a desire to achieve higher achievements. When the internal locus of control possessed by students is high, students have higher self-confidence, a willingness to work hard, and a fear of failure, which raises an attitude of optimism.

This study also examines self-concept, which is thought to be an internal factor that affects academic optimism. Self-concept possessed by individuals will influence individuals’ behavior concerning adjustments to the environment, making it easy for individuals to solve the problems they face (Kingery et al., 2011). A positive self-concept and an optimistic attitude are worthy of being raised by everyone because with these two things, individuals will tend to increase themselves to do better. For example, they are willing to learn and openness to experience related to achievement (Hattie, 2008). Besides, self-concept can also act as a mediator variable (Ahn & Lee, 2016; Chen et al., 2020; Veas et al., 2019) about the educational context.

External factors that are thought to influence academic optimism are democratic parenting and the school climate. Parenting style involves emotional climate and psychological constructs that function in the child’s development (Anderson, 2011). Parenting is an important and influential factor in adolescents’ development. It has been linked to psychological adjustment, social development, academic achievement, and behavioral problems (Chang, 2014). On the
other hand, one way to improve education is by improving the school climate. Through their research, Way et al. (2007) found a close relationship between the school climate, especially in high schools, and the students’ ability to adapt, including on the academic side.

Research on academic optimism has been carried out a lot, but it is different from previous studies primarily related to academic achievement. In contrast, this research considers psychological factors more. The study of the factors that influence academic optimism above is interesting for researchers to determine democratic parenting, school climate, internal locus of control, and self-concept as essential constructs in students’ academic optimism. Therefore, the problem in this research can be formulated as follows:

1. Can students’ academic optimism be shaped by parental democratic parenting, school climate, locus of internal control, and self-concept?
2. Is there an effect of parental democratic parenting on the locus of internal control and academic optimism of students?
3. Is there an effect of the school climate on students’ self-concept and academic optimism?
4. Does the internal control locus partially mediate parental democratic parenting of students’ academic optimism?
5. Does the self-concept partially mediate the school climate on students’ academic optimism?

**Methodology**

**Research Design, Population and Sample**

This quantitative research used a cross-sectional non-experimental design that aimed to measure the contribution of each variable to the study constructed model. The correlation between two variables allows the researchers to predict the value of one variable if the other variable is known. The relationship to be explained is the causal relationship between the independent variables and the dependent variable. The population in this study was eighth-grade students of State Junior High School in Kediri, East Java. The sample of this study was three hundred thirty-five students (46.57% male; 53.43% female) spread across three districts of Kediri City. The sampling technique used cluster random sampling technique by determining the school cluster randomly. The total number of schools, eight schools, became the study population. Then we did random to determine the schools that were used as samples. As a result, four schools were selected.

**Research Instrument and Procedure**

The data collection instrument in this study used a scale to measure each research construct: a democratic parenting scale, school climate scale, internal locus of control scale, self-concept scale, and academic optimism scale. Furthermore, for each scale, the development of the instrument was carried out by following the steps stated by Hair et al. (2014), including (a) defining individual constructs; (b) developing an overall measurement model; (c) designing research to obtain empirical evidence; (d) measuring the validity of the measurement model; (e) specifying structural model; and (f) measuring the validity of the structural model.

The first stage is to define individual constructs, which is done by operationalizing the constructs, searching the literature and identifying the scales used, developing new scales, and conducting tests (Hair et al., 2014). Before the instrument was tested on the respondents, the researcher went through the instrument validation procedure which was carried out through an expert test consisting of 4 reviewers to conduct item and construct studies. Items that have passed content validation are then rearranged according to the previously designed grid.

The next stage is to develop and specify the measurement model. To complete the measurement model, the researcher used specifications using relationship measurements for items and constructs, relationships between constructs, and error terms for items (Hair et al., 2014). The steps that researchers must take are to confirm the validity and nature of the variable dimensions.

The confirmatory factor analyses technique used in testing the five constructs in this study is first order and second order (Ghozali, 2014). This analysis was conducted to test the validity of the items, while the indicators and dimensions are measures of the dimensionality latent construct (Ghozali, 2014). The dimensionality test on the constructs of parenting democratic, school climate, internal locus of control, and self-concept were proven to have met the criteria. At several stages of the model of each construct, the error term for the items is used as the last alternative to obtain a fit model.

The item’s validity on the dimensions is determined at 0.4 as the minimum level for interpreting the structure, which means that the indicator contributes 40% in forming the developed construct (Hair et al., 2014). Items that have a loading value of 0.4 will be aborted and not included in the analysis. In the next step, if two or three item loading factor values are found in one indicator > 0.4, the item to be analyzed further is the item with the highest factor loading. One
Then, the item reliability was tested using Cronbach’s Alpha coefficient and then compared with the construct reliability value as an indicator of convergent validity (Hair et al., 2014). The agreed rule for good reliability estimation is 0.70 and, reliability between 0.6 – 0.7 is accepted when several indicators in the construct validity of the model are declared good (Hair et al., 2014). The fourth and fifth stages of structural equation modeling analysis require goodness of fit values that meet the criteria to continue the measurement model until a fit model is obtained in the sixth stage.

The instrument for democratic parenting variables used the democratic parenting scale identified by Baumrind (1967) and developed by Maccoby and Martin (1983). The researcher developed the scale of democratic parenting so that there are sixteen items and has four answer choices: always, often, sometimes, and never. The respondents were asked to respond to statements on the most appropriate response choices regarding dimensions of democratic parenting. The example of the questions is as follows: “When I express my opinion, my parents always listen and please give opinions”; “my parents always support every activity that I do.” The researcher used the following criteria to determine the value of the indicator: the validity value is 0.818, and the reliability coefficient value for the parental control dimension is 0.74, communication clarity is 0.89, and parental demands are 0.854.

The school climate variable instrument uses a school climate scale that refers to the school climate concept developed by Cohen et al. (2009). The researcher further modified the school climate scale, consisting of thirty-four items, and had four answer choices: always, often, sometimes, and never. Respondents were asked to respond to statements on the most appropriate response choices regarding aspects of the school climate, such as, “I only make friends with friends who often help me”; “I like to discuss with friends when there are lessons that I do not understand.” The researcher used the following value to determine the value of each indicator: the validity value is 0.722, the reliability coefficient value for the interaction dimension between students is 0.889, interpersonal relations is 0.823, discipline perception is 0.94, and the perception of school facilities is 0.90.

The instrument for the internal locus of control variable uses an internal locus of control scale. Individuals with an internal locus of control have a general expectation that they are in control of their own lives. Success or failure is largely determined by his own abilities and efforts (Ormrod, 2003). The internal locus of control scale consists of thirty-six items and has four answer choices: always, often, sometimes, and never. Respondents were asked to respond to statements on the most appropriate response choices regarding aspects of internal locus of control, such as, “I am one of those people who procrastinate on schoolwork,”; “I believe every problem will find a solution.” The instrument for the internal locus of control variable uses an internal locus of control scale. Individuals with an internal locus of control have a general expectation that they control their own lives. Successors’ failure is primarily determined by his abilities and efforts (Ormrod, 2003). The internal locus of control scale consists of thirty-six items and has four answer choices: always, often, sometimes, and never. Research respondents were asked to respond to statements on the most appropriate response choices regarding aspects of the school climate, such as, “I only make friends with friends who often help me”; “I like to discuss with friends when there are lessons that I do not understand.” The researcher used the following value to determine the value of each indicator: the validity value is 0.767. The reliability coefficient value for the independent attitude dimension is 0.720; self-satisfaction is 0.786, individual effort is 0.788, positive thinking is 0.829, competing is 0.844, personal self-confidence is 0.805, unyielding is 0.726, optimistic attitude is 0.726, and behavioral control of 0.889.

The instrument for the self-concept variable uses a self-concept scale developed by Calhoun and Acocella (1995), which categorizes aspects of self into five aspects: physical self (including self-acceptance), process self (expectations to be achieved, curiosity, sincerity), social self (including student interaction) with teachers, student interactions with school friends, student interactions with parents, relationships with the school environment), personal self and self-aspirations (including independence, emotional maturity). This scale consists of twenty-seven items and has four answer choices: always, often, sometimes, and never. Research respondents were asked to respond to statements on the most appropriate response choices regarding aspects of self-concept, such as, “I have an unattractive appearance”; “I like to help friends.” The researcher used the following value to determine the value of each indicator: the self-concept scale has a validity value of 0.779, and the reliability coefficient value for the dimensions of self-acceptance is 0.758, curiosity is 0.802, seriousness is 0.832, student interaction is 0.845, independence is 0.848, and emotional maturity is 0.808.

Students’ academic optimism in the study was measured using the Life Orientation Test-Revised (LOT-R) compiled by Schéier et al. (1994). The LOT-R measuring instrument has validity and reliability values with a range of 0.7 to 0.8. Although in previous studies the measuring instrument showed valid and reliable results in general, this study also looked at the results of validity and reliability. The validity value is 0.742, and the composite reliability coefficient value for the dimension of permanence is 0.94, pervasive is 0.917, and personalization is 0.926. Research respondents were asked to respond to statements on the most appropriate response choices regarding aspects of academic optimism, such as, “someone stole money from you, then (a) people are dishonest (b) that person is honest.
Data Analysis

The research data analysis technique used Structural Equation Modeling analysis with Amos software version 21.0. Also, the researchers conducted the descriptive analysis on the data obtained in this study with SPSS software version 20.

Results

Descriptive Analysis

This study focuses on Junior High School students in Kediri, East Java, totaling three hundred thirty-five students. As a first step of the analysis process, the researchers conducted a descriptive analysis of the data obtained in this study. To find out a more detailed description, the researcher used categorization of the scores of each variable. Categorization is based on the mean (mean) and hypothetical standard deviation (SD), using four categorization intervals. The four interval classes are qualitatively classified into very high, high, moderate, and low. The determination of this category is based on the assumption that the subject’s score is typically distributed, divided into six parts or six standard deviation units (Azwar, 2012). A very high score indicates an excellent variable condition. A high score indicates a good state of the variable. A moderate score suggests a reasonably good variable condition, while a low score indicates a variable condition that is still low or not good.

Table 1 shows the results of the descriptive analysis of each construct, where the level of democratic parenting and internal locus of control is in the high category with a percentage of over 46%, while the level of school climate, self-concept, and academic optimism is in the moderate category with a percentage above 44%. The summary of the descriptive analysis can be seen in Table 1.

Table 1. Results of Descriptive Analysis for Each Construct

<table>
<thead>
<tr>
<th>The construct</th>
<th>Level</th>
<th>Score</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic parenting</td>
<td>Low</td>
<td>34-44</td>
<td>5</td>
<td>18.21</td>
<td>62.57</td>
<td>7.82</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>45-55</td>
<td>61</td>
<td>46.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>56-66</td>
<td>157</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>67-77</td>
<td>112</td>
<td>33.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School climate</td>
<td>Low</td>
<td>77-92</td>
<td>55</td>
<td>16.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>93-108</td>
<td>179</td>
<td>53.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>109-124</td>
<td>95</td>
<td>28.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>125-140</td>
<td>6</td>
<td>1.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>Low</td>
<td>66-81</td>
<td>11</td>
<td>3.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>82-97</td>
<td>150</td>
<td>44.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>98-113</td>
<td>156</td>
<td>46.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>114-129</td>
<td>18</td>
<td>5.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept</td>
<td>Low</td>
<td>56-67</td>
<td>69</td>
<td>20.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>68-79</td>
<td>152</td>
<td>45.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>80-91</td>
<td>97</td>
<td>28.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>92-103</td>
<td>17</td>
<td>5.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic optimism</td>
<td>Low</td>
<td>7-14</td>
<td>115</td>
<td>34.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>15-22</td>
<td>170</td>
<td>50.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>23-30</td>
<td>31</td>
<td>9.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>31-38</td>
<td>19</td>
<td>5.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: SD = Standard Deviation

Assumption Test

The following tests must be carried out to analyze the structural equation model by looking at several assumptions that must be met, including (a) the number of samples in the test with a structural equation model consisting of at least five constructs is 150. The sample used in this study was 335 respondents. It has met the minimum sample size for testing; (b) SEM analysis assumes that the data are typically distributed, both univariate and multivariate. The values for critical ratio (CR) are in the range -2.58 to 2.58 (-2.58 <CR <2.58), therefore the assumption of data normality needed by analysis SEM is fulfilled; (c) The following assumption was the multivariate outlier. The multivariate outlier was carried out by checking the Mahalanobis distance, which was in the output of the analysis result with AMOS. Then, the chi-square value table at 25 degrees of freedom (number of dimensions) at a significance level of 0.001 (x2 α 0.001; 25) of 52.620 is used as a critical value. Based on this value, some respondents showed a value of Mahalanobis distance is
above 52.620 which means they are a symptom of the multivariate outlier; (d) the following assumption to be tested is the absence of multi-collinearity. The test results showed that the determinant value of the covariance matrix is 291039093919765,000, which means that the value is very large or very far from zero, so that the assumption of no multi-collinearity can be fulfilled.

Furthermore, we can look at the following structural equation model to determine the correlation between the variables studied. This equation was designed to express causality between constructs. In this section, the equation was made between the variables of democratic parenting, school climate, internal locus of control, self-concept, and academic optimism. The structural model tested in this study can be seen in Figure 1.

**Figure 1 The Structural Equation Model**

**Table 2. The Goodness of Fit Results from Structural Model**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Results</th>
<th>Critical Value</th>
<th>Evaluation of Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square ($\chi^2$)</td>
<td>246.056</td>
<td>$\leq 255.6018$</td>
<td>Good</td>
</tr>
<tr>
<td>Probability</td>
<td>.110</td>
<td>$\geq 0.05$</td>
<td>Good</td>
</tr>
<tr>
<td>CMIN / DF</td>
<td>1.118</td>
<td>$\leq 2.00$</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>.994</td>
<td>$\geq 0.90$</td>
<td>Good</td>
</tr>
<tr>
<td>AGFI</td>
<td>.918</td>
<td>$\geq 0.90$</td>
<td>Good</td>
</tr>
<tr>
<td>CFI</td>
<td>.990</td>
<td>$\geq 0.95$</td>
<td>Good</td>
</tr>
<tr>
<td>TLI</td>
<td>.986</td>
<td>$\geq 0.95$</td>
<td>Good</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.019</td>
<td>$\leq 0.08$</td>
<td>Good</td>
</tr>
</tbody>
</table>

Figure 1, Table 2 presents the results obtained in the analysis which were modified based on the modification while the results of the recommendation values were used to measure the feasibility of the model. The feasibility test results of this modified structural model showed that all the criteria used had good values, and the model's feasibility requirements have been met so that this structural model can be used to test direct or indirect effects.

**Direct and Indirect Effects**

Based on the results of calculations through structural equation model analysis, this research model can be verified. We can see from the chi-square value ($X^2 = 246.056 \leq 255.6018$; with $p = 0.110 \geq 0.05$, which means that there is no difference between the structural model and the empirical data in this study that the structural model built has received empirical support. Furthermore, the results of the analysis of direct and indirect effects are described.
The influence between constructs produces information: direct effect, indirect effect, and total influence (Hair et al., 2017). The direct effect is the effect of one construct on another, which is shown only in one direction. The indirect effect is the effect of a construct on other constructs, at least through one construct as a mediator. The indirect effect is calculated by multiplying the values of the coefficient of direct effect between constructs. The total effect is the sum of direct and indirect effects (Hair et al., 2017). Table 3 below shows the results of the coefficient of direct and indirect effect and the total effect.

### Table 3. The Results of Direct and Indirect Effects

<table>
<thead>
<tr>
<th>Line Direction</th>
<th>Direct Coefficient</th>
<th>Indirect Coefficient</th>
<th>Total Coefficient</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁ → Y₁</td>
<td>.427</td>
<td>-</td>
<td>.427</td>
<td>.001</td>
</tr>
<tr>
<td>X₂ → Y₂</td>
<td>.725</td>
<td>-</td>
<td>.725</td>
<td>.001</td>
</tr>
<tr>
<td>Y₂ → Y₃</td>
<td>.557</td>
<td>-</td>
<td>.557</td>
<td>.001</td>
</tr>
<tr>
<td>Y₁ → Y₃</td>
<td>.134</td>
<td>-</td>
<td>.134</td>
<td>.001</td>
</tr>
<tr>
<td>X₁ → Y₃</td>
<td>.016</td>
<td>-</td>
<td>.016</td>
<td>.001</td>
</tr>
<tr>
<td>X₂ → Y₃</td>
<td>-.597</td>
<td>-</td>
<td>-.597</td>
<td>.001</td>
</tr>
<tr>
<td>X₁ → Y₁ → Y₃</td>
<td>.016</td>
<td>.057</td>
<td>.073</td>
<td>.001</td>
</tr>
<tr>
<td>X₂ → Y₂ → Y₃</td>
<td>-.597</td>
<td>.404</td>
<td>-.193</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note: X₁ = Democratic Parenting; Y₁ = Internal Locus of Control; X₂ = School Climate; Y₂ = Self-concept; Y₃ = Academic Optimism

Based on table 3, it is known that there are six coefficients of direct effect and two coefficients of the indirect effect. The resulting direct effects are: (1) the effect of democratic parenting on the internal locus of control is 0.427 and p-value (< 0.05); (2) the effect of school climate on self-concept is 0.725 and the p-value (< 0.05) is significant; (3) the effect of self-concept on academic optimism is 0.557 and the p-value (< 0.05) is significant, (4) the effect of internal locus of control on academic optimism is 0.134 and the p-value (< 0.05) is significant; (5) the effect of democratic parenting on academic optimism is 0.016 and the p-value (< 0.05) is significant; (6) the effect of school climate on academic optimism is -0.597 and the p-value (< 0.05) is significant. We can infer the resulting indirect effects as follows: (1) the effect of democratic parenting that influences academic optimism with the mediation of internal locus of control has a coefficient value of 0.057 and p-value (< 0.05) is significant; (2) the effect of school climate on academic optimism mediated by self-concept has a coefficient value of 0.404 and a significant p-value (< 0.05) is significant.

### Discussion

Based on the empirical tests, the academic optimism theoretical model in Junior High School students is feasible. This model can be used on samples that have been studied with the grand theory approach of academic optimism from Seligman (2006). This theoretical approach refers to a positive psychological perspective that puts forward students' positive experiences and characteristics. This study has limitations in two aspects, such as in the choice of data collection, only through questionnaires, and its application is in the context of Junior High School education. However, it provides evidence about the formation of students' academic optimism, which is influenced by supporting factors such as democratic parenting, school climate, internal locus of control, and self-concept.

Parents perceive democratic parenting as reasonable control of their children, clarity of communication, and demands for children's maturity. When looking at the study results, democratic parenting positively and significantly influences students' internal locus of control and academic optimism. Parenting is a very complex and challenging phenomenon that is very difficult to be understood and defined. Parenting styles depend on parents' behavior and attitudes, which represent standard strategies parents use in raising children (Kordi & Baharudin, 2010). Also, parenting style is very important in an individual's development, especially as a determinant of a child's development (Baldwin et al., 2007; Gadeyne et al., 2004). That opinion is in line with Shapiro (1997) that suggests that children tend to imitate their parents' behavior. They will try to understand the good and bad aspects. If parents are optimistic, then children will be optimistic too. Children first learn about optimism from parents, especially mothers. Children learn from the mother talks, and the mother responds to the child's questions. The child listens carefully to what the mother says, such as asking the child always to be studious, or giving pleasant words and convincing the child that the harmful events are only for specific events and not because of their mistake.

According to Baumrind’s study, as cited by Santrock (2002), the impact of democratic parenting makes children tend to feel safe, exploratory, straightforward, have self-control, and can rely on themselves. This situation indeed does not exist in children who are cared for using permissive or autocratic parenting. Therefore, mistakes in implementing parenting patterns can harm children's development, especially an optimistic attitude towards the children. When parents apply democratic or authoritarian parenting, researchers believe that children can explore their potential, having the ability to try, and having a high interest in learning. The results of Özpehriz (2020) study show that
parenting is a predictor of optimism. Authoritative or democratic parenting is a positive predictor of optimism, while authoritarian parenting is hostile. Protective parenting style was found not to be a predictor of optimism.

Exploration of the potential developed by children has positive consequences. The ability that students perceive positively because students have self-confidence, strive and believe in achieving goals, believe in positive results, and have abilities, efforts, and interests that can be understood as internal locus of control (Bernardin, 2003). In an educational context, several studies have been conducted to investigate internal locus of control. Those previous researches showed positive results, such as student motivation (Kader, 2014); academic self-concept (Rinn et al., 2014); academic success (Carden et al., 2004); academic achievement (Abid et al., 2016; Shepherd et al., 2006); and self-efficacy (Sagone & De Caroli, 2014).

The results indicate that democratic parenting plays a positive role in the internal locus of control and contributes to the research of internal locus of control for students. The study of parenting and locus of control conducted by Jankowska et al. (2014) find that students with average intelligence, autocratic parenting style, and strict parenting of their mothers are significantly correlated with learning motivation and locus of control for academic success. This factor, in turn, can have a moderate effect on the level of school adaptation, involvement and feelings in controlling academic learning, and academic performance. In line with this, Sujadi (2020) reports that the locus of control negatively correlates with students' achievement and suggests students have an internal locus of control while believing in God. This theory certainly shows that the diversity of parenting styles, both democratic and autocratic, determine the students' locus of control.

This study also found that the internal locus of control was a sufficiently good construct to mediate democratic parenting towards students' academic optimism. The pattern of mediation is partial mediation, where there is an indirect effect among democratic parenting, internal locus of control, and students' academic optimism. It means that democratic parenting can affect the students' internal locus of control. The fulfillment of the internal locus of control can positively affect students to be optimistic in achieving their goals and give students the confidence to do something or make positive changes in the school. The study regarding the internal locus of control in research such as those reported by Rodriguez-Ricardo et al. (2019) showed that altruism and internal locus of control could increase self-confidence, which affects the individual's intention to participate. Individuals with an internal locus of control feel that they have some responsibility for the task's success. Therefore, they can decide to contribute. The reason behind this expectation is that individuals with the internal locus of control believe that they can control various factors in their life (Çakır, 2017; Manichander, 2014).

The success or failure of a student who has an internal locus of control in his learning outcomes is due to the student's efforts and responsibility (Anggraini & Marwan, 2020). In line with this, Friedman & Schustack, 2013 state that individuals with an internal locus of control are more oriented to success because their actions will produce something positive. Thus, this study's internal locus of control, characterized by self-confidence, willingness to learn, and abstinence from fear, act as a partial mediator of democratic parenting on students' academic optimism. Individuals who have an internal locus of control have a positive impact on their lives and make their work more successful. The other side also results in a maturity of thought that determines an individual's career higher (Munawir et al., 2018), and the combination of internal locus of control and the existence of social support is very good in determining students to complete academic tasks at school (Sari & Fakhruddiana, 2019).

One environmental factor that plays an important role in the education domain is the school environment. Several previous studies have discussed quite a lot about school environmental factors, but there are still few previous studies discussing the school climate that supports academic optimism. LaPointe (2006) shows that the school environment positively correlates with teacher needs and has a positive correlation with the classroom environment. Furthermore, the school environment has a significant negative relationship with the classroom environment. On the other hand, the research results from Beri et al. (2020) reported that there was a significant difference between academic optimism and professional commitment, and differences between academic optimism and organizational climate. The organizational climate tends to form social needs that describe individual social relationships with the immediate environment and cooperation between individuals for the achievement of common organizational goals.

Besides, Hoy and Miskel (2014) see organizational climate from various points of view. Concerning the school climate, three things must be understood, including the openness of school organizations, the existence of school organizational health, the citizenship of the school organization, and the presence of a conducive atmosphere. In line with this, Pretorius and de Villiers (2009) show a significant correlation between perceptions of organizational climate and organizational health. The school organizational climate has important implications for school changes and teacher satisfaction at work. The school organizational climate has significant implications for school changes and teacher satisfaction at work. Besides, according to Cohen et al. (2009), school climate plays a vital role in teacher satisfaction promoting students' learning. A teacher can become a model and benefit for schools, especially in the learning process with students, so the teacher has the satisfaction of psychological needs experienced by the teacher.

When looking at research results, school climate is a predictor of self-concept and academic optimism. School climate is seen as a student's psychological experience related to life at school that can affect students' learning processes and
outcomes measured by indicators of good relationships with students and teachers, a good understanding of the discipline, and a good understanding of school facilities. In contrast, the self-concept is perceived by students about how students perceive themselves physically, psychologically, and socially. They are measured by self-acceptance, expectations to be achieved, curiosity, sincerity, student interaction with teachers, interaction among students, student interactions with parents, relationship with the community, independence, and emotional maturity.

The relationship between school climate and self-concept and academic optimism shows that the more these students support a good school climate in carrying out their duties, the more students’ self-concept and academic optimism increase in carrying out learning activities at school. When referring to the results of descriptive analysis of research data, the construct of school climate, self-concept, and academic optimism has been convincingly supported by empirical data. Descriptive data shows that the climate level of the Junior High School students in Kediri is classified as moderate, and the level of self-concept and academic optimism of students is average. It means that students felt the psychological experience in school life. Students have good enough relationships with fellow students and teachers, and students have a good enough understanding of the discipline and a good understanding of school facilities. Good communication between teachers and students in schools impacts teachers’ teaching motivation in schools. The role of students in the school directly plays a significant role for teachers in shaping their teaching motivation. The results of research conducted by Utomo et al. (2019) show that school environmental factors support and play an essential role in developing teachers’ motivation, impacting students’ academic optimism in school. The direct effect of school climate on academic optimism also strengthens the statement from Wei (2012). Furthermore, Werang (2018) stated that school climate as an external factor strongly influences the activities of teachers and students in schools, and teachers who understand the importance of school climate will have implications for education.

The phenomenon of optimism conveyed by Tsivilskaya and Artemyeva (2016) aims to disclose individual capacities and professional and enable adaptive human interaction with the environment. Those become essential for a student when a system of self-concept and abilities is formed. Students who get higher scores on different subjects in the previous class have a higher self-concept, and students who are more optimistic with higher self-concept can set higher future goals (Prah et al., 2009). This study supports the results of this study where there is a relationship between self-concept and academic optimism.

This study also contributes to self-concept as a mediator of school climate variables in influencing students’ academic optimism. The pattern of mediation is partial mediation, where there is an indirect influence between school climate, self-concept, and students’ academic optimism. This mediation pattern means that the higher the students’ self-concept, the higher the support of the school climate that students feel, which has an impact on students’ high academic optimism. That statement is in line with research conducted by Akhn et al. (2015), explaining that self-concept has a mediating role towards psychological outcomes, where personal self-concept plays an important role as a mediator between psychological insight and vulnerability. If students have a high level of understanding by a high self-concept, it will also reduce psychological exposure. In education, self-concept has a vital role as a mediating variable for school adjustment and academic achievement and is related to self-esteem (Ahn & Lee, 2016; Chen et al., 2020; Veas et al., 2019). Therefore, the self-concept in this study can act as a partial mediator of the school climate on students’ academic optimism and be a contribution to positive psychology research.

Based on the above discussion, we can conclude that democratic parenting, school climate, self-concept, and internal locus of control affect students’ academic optimism. The results of this study can be used as a basis for increasing students’ academic optimism, especially in the East Java region. Academic optimism using positive psychological theory is a continuous and multidimensional process. Further researchers should carry out more in-depth research on the academic optimism of students at different school levels and regions. Therefore, they can add more accurate and up-to-date reference sources related to students’ problems in the educational field, such as academic self-confidence, the academic achievement of students during the covid-19 pandemic, and others.

Conclusion

Based on the research results, we can conclude that the structural model of students’ academic optimism compatibility with theoretical concepts and empirical data. It means that the support of democratic parenting, school climate, self-concept, and internal locus of control are essential factors for forming students’ academic optimism. The conclusions indicate that democratic parenting has a positive and significant effect on students’ internal locus of control and academic optimism. Secondly, school climate has a positive and significant impact on students’ self-concept and academic optimism. Then the internal locus of control can act as a partial mediator of democratic parenting towards students’ academic optimism; and fourth, self-concept can act as a partial mediator of the school climate on students’ academic optimism. The implication of this research is the need for the development program of students’ academic optimism carried out by school members, especially homeroom teachers, by optimizing and considering the influencing factors examined in this study.
Recommendations

The theory of academic optimism is a relatively new idea, and this research has broadened the theoretical conversation about academic optimism. This research on academic optimism is based on a quantitative approach. Because many empirical studies have examined this construct using a quantitative approach, further analysis can use a qualitative approach. The results of this study have provided in-depth knowledge of the topic. They have provided specific examples of how schools affect student learning outcomes in their schools and use parts of academic optimism to make a difference. Building a theory of academic optimism based on a qualitative approach is very useful, and this research will assist other researchers in adding views about academic optimism.

Limitations

Data collection was carried out using a scale used to measure the research variables. Filling in the instrument in the form of a scale has limitations due to respondents’ answers who sometimes choose answers that they think are good and follow the norms prevailing in society. It has an impact on research analysis. In addition, data was collected from the student through a self-report survey.

Acknowledgements

The authors would like to thank Guidance and Counseling Doctoral Study Program, Faculty of Education, State University of Malang. The authors also thank for the funding support provided by the Indonesian Ministry of Research, Technology and Higher Education through the Doctoral Dissertation Research (PDD) Grant Number: 059 / SP2H / LT / KM / 2018

Authorship Contribution Statement

Ratnawati: Conceptualization, design, analysis, writing. Setyosari: Reviewing, writing, supervision. Ramli: Reviewing, writing, supervision. Atmoko: Drafting manuscript, editing, supervision.

References


Carden, R., Bryant, C., & Moss, R. (2004). Locus of control, test anxiety, academic procrastination, and achievement among college students. Psychological Reports, 95(2), 581–582. https://doi.org/10.2466/pr0.95.2.581-582


Wei, Y. (2012). *A hierarchical approach to examine personal and school effect on teacher motivation* [Doctoral dissertation, The Ohio State University]. The Ohio State University.
