The Role of Academic Efficiency on Student Learning Engagement

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Abstract

The focus of this research is on the role of academic efficacy on student engagement. This study uses a literature study research method. The source of data in this study is a collection of documents related to the focus of the research. Therefore, the search process in collecting data for this research requires several search engines, including Google Scholar, Researchgate, ScienceDirect, and directories from various campuses. After searching the data, 130 scientific articles were collected, but the data used were only 10 scientific articles. This is because the research subjects used in scientific articles are not the age of students, variables that are not related to academic efficacy and student learning involvement, research results that do not play a role in learning engagement, the year of publication of scientific articles under 2017 and the use of languages other than Indonesian and English. The analysis technique in this study uses content analysis techniques. The results of this study illustrate that the ability of academic efficacy has a positive role on the ability of student learning engagement, meaning that the better the ability of academic efficacy possessed, the better the ability of learning engagement of students, and vice versa if the ability of academic efficacy possessed by students is poor. then the ability of student learning engagement will be bad as well.

Keywords: Academic Efficacy; Student Engagement; College

Introduction

The student is at a higher education level after someone finishes his school at the high school level (SMA). Students have a responsibility to realize the nation's civilization, this has been stated in Law no. 12 of 2012 concerning higher education. Therefore, to achieve this goal, a student must be able to complete his education well. For this achievement, students must have the ability to engage in learning (student engagement), because these abilities support the learning process so that it can take place well (Schunk & Pajares, 2005; Ladd & Dinella, 2009). If students who do not have this ability will be at risk of dropping out, in the sense that they cannot continue their education process, then the educational goals will not be achieved (Finn, 1989). It can be concluded that this learning involvement can protect students against the risk of dropping out. This is reinforced by research that learning abilities reduce drop-out behavior in students (Arlinkasari & Akmal, 2017; lasha et al., 2020).
Student engagement is defined as a term to identify student involvement in the educational environment, including the learning process in the classroom (Rachamatika et al., 2021; Sudrajat et al., 2021). In more detail, Reyes et al. (2012) describe that students who are categorized as engaged if they have attended and are fully involved in class discussions, exert effort in-class activities, and show interest in learning. Some results from research in the academic environment say that students who can be engaged tend to be more likely to set learning goals, use effective strategies in learning, have understanding, evaluate goals, and create a good environment for learning (Asrifah et al., 2020; Majir, 2019).

Student Engagement ability is divided into several dimensions, Fredricks et al. (2003), divides learning engagement into 3 dimensions including 1) Behavioral Engagement, Fin identifies behavioral involvement in 3 ways. The first definition describes positive behaviors such as following rules and obeying norms in the classroom, as well as the absence of disruptive behaviors such as truancy and trouble. The second definition deals with involvement in learning and academic tasks and includes behaviors such as asking questions, paying attention, concentration, effort, persistence, and contributing to class discussions. The third definition includes participation in campus activities such as athletics or extracurricular and campus governance (Fredricks et al., 2004). 2) Emotional Engagement, emotional involvement is the students' emotional feelings towards the campus and teachers such as boredom, happiness, sadness, and anxiety. Finn (1989) assumes that emotional involvement is a process of student identification with the campus. The identification is in the form of a sense of belonging (part of the campus) and the value of the student (appreciation for success in academic results). 3) Cognitive Engagement, cognitive engagement focuses on the psychological investment in learning needed to understand and master the knowledge and skills taught on campus. Connell & Wellborn (1991) conceptualized that cognitive engagement includes flexibility in problem-solving, encouragement to work hard and a positive attitude in the face of failure. Students who are cognitively involved have good self-regulation and can follow the learning provided by the teacher. From these three dimensions, it can be concluded that involvement includes affective, cognitive, and emotional aspects of a student.

Many abilities also affect learning abilities, one of which is self-efficacy abilities whereas low self-efficacy will have an impact on low learning engagement (Schunk & Mullen, 2012; Setiawan et al., 2021). Self-efficacy is a process of cognition in the form of decisions, beliefs, or appreciation for the estimated ability of oneself in carrying out certain tasks or actions (Rafikayati et al., 2018). Ghufron & Risnawita (2012) assume that a person's skills are not included in a person's efficacy, but this self-efficacy ability is related to the extent to which a person believes in what he can do with his skills. He further said that self-efficacy combined with the environment, previous behavior, and various other personal variables. Therefore, the ability of self-efficacy can guide a person to reach their goals and survive all the difficulties they face. Linnenbrink & Pintrich (2003) believe that students who have self-efficacy will have the ability to work hard, persevere, and ask for help politely when experiencing difficulties.

So efficacy is believed to be a person's belief in himself that he can master the situation and produce positive results (Juniarso et al., 2020; Santrock, 2021). The results in question can be in the form of achievements in academic activities. Several factors can develop this ability. According to Bandura, four factors can develop self-efficacy abilities, including personal experience (mastery experience), the experience of others (vicarious experience), verbal persuasion (verbal persuasion), and physiological conditions (physiological state) (Acesta et al., 2021; Ghufron & Risnawita S, 2010).

Referring to the expression, self-efficacy is divided into 3 types, namely social self-efficacy, self-regulatory efficacy, and academic self-efficacy, it can be concluded that self-efficacy is specific (Baron & Byrne, 2004; Iasha, 2018). The self-efficacy that will be used in this study is academic efficacy. Academic efficacy relates to a person's ability to do tasks, manage learning activities independently, and live with his academic expectations and those of others (Baron & Byrne, 2004). So academic efficacy refers to a person's ability to master academic matters (Marudut et al., 2020; Suryanto et al., 2017). Based
on what has been described previously, the focus of this research is the role of academic efficacy on student learning engagement, using the library study research method, which is a method that aims to collect documents related to the focus of research problems. Therefore, the formulation of the problem in this study is "how is the role of academic efficacy on student learning engagement?"

**Method**

**Research Design**

This study uses qualitative research methods with the type of library research (library research). Literature research is research that focuses on the analytical level and has an emic perspective, meaning that data acquisition is not based on the perception of the researcher, but based on conceptual facts or theoretical facts (Hamzah, 2020). In more detail, Zed, (2008) defines literature as all activities related to collecting library data, reading and taking notes, and processing research materials. In analyzing the data, this study uses content analysis techniques.

**Data Resources**

This study uses secondary data sources, which means this research uses documents in the form of articles, papers, essays, seminar results, and other documents as sources for data analysis. Therefore, in collecting journals or documents, search engines are needed to help search. Some of the search engines used are Google Scholar, Researchgate, ScienceDirect, and directories from various campuses.

Limiting problems in this study are academic efficacy skills and student engagement skills. Student involvement in learning is divided into 3 dimensions, namely cognitive dimensions, behavioral dimensions, and emotional dimensions. Then the ability of academic efficacy which is the influence on student involvement in learning. Therefore, the screening process, reading, and abstract identity process were carried out with the keywords 1) academic efficacy and cognitive engagement, 2) academic efficacy and behavioral involvement, 3) academic efficacy and emotional involvement. In the first search process, researchers found 50 scientific articles, in the second search process researchers found 10 journals, in the third journal search process researchers found 20 journals, in the fourth search researchers found 20 journals, in the fifth search researchers found 30 journals. So the total number of journals found was 130 journals. Search data in the study using the range limit between the 2017-2021 period.

**Data Search Strategy**

The data or literature search strategy in this study uses the PICOS framework. PICOS is an acronym for 4 components, namely Population/Problem, Intervention/Indicators, Comparation, Outcome, Study Design. The Population / Problem component contains the population or problem to be analyzed in accordance with the themes that have been determined in the literature review. The Intervention / Indicators component contains an action or indicator of the problem in accordance with the theme raised in the literature review. The Comparation component contains interventions that are used as comparisons. If none can use the control group in the selected study. The Outcome component contains the results or outcomes obtained in previous studies that are in accordance with the themes in the literature review. The Study Design component contains the research design used in scientific articles that will be reviewed.
Table 1. Inclusion and Exclusion Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>College student</td>
<td>Elementary School, Middle School, High School</td>
</tr>
<tr>
<td>Intervention</td>
<td>Academic Efficacy and Student Learning Engagement</td>
<td>Social Efficacy, Emotional Efficacy</td>
</tr>
<tr>
<td>Comparators</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Outcome</td>
<td>Have a role or influence on student learning engagement.</td>
<td>Has no role or influence on student engagement.</td>
</tr>
<tr>
<td>Study Design and Publication Type</td>
<td>Experimental, Quantitative, Qualitative.</td>
<td>Nothing</td>
</tr>
<tr>
<td>Publication Years</td>
<td>Post 2016</td>
<td>Pre 2017</td>
</tr>
<tr>
<td>Language</td>
<td>Indonesian and English</td>
<td>Apart from Indonesian and English</td>
</tr>
</tbody>
</table>

Based on the table above, the process of eliminating journal searches is based on: research subjects other than student age, variables that are not related to academic efficacy and student learning involvement, research results that do not play a role in learning engagement, year of publication of scientific articles under 2017 and the use of languages other than Indonesian and English.

Data Selection

The data selection process was carried out in several stages: 1) Identification of research title, name of researcher, abstract, 2) screening on research objectives, research methods, and research results. 3) Assessment of scientific articles whether they can be continued and analyzed or eliminated. 4) determination of scientific articles that are analyzed and eliminated.

A total of 130 scientific articles with keywords:
1. Academic efficacy and cognitive engagement
2. Academic efficacy and behavioral engagement
3. Academic efficacy and emotional engagement

A total of 10 scientific articles are considered

The selection process is carried out because:
1. Research subjects do not use students
2. Using unrelated variables
3. Using languages other than Indonesian and English
4. Years of publication under 2017

Figure 1. Flow of Identification, Screening, and Elimination of Scientific Articles
Based on references from other scientific articles, the search criteria for scientific articles has additions, such as the use of terms other than academic efficacy, namely academic efficacy. Through the data selection results from a total of 130 scientific articles that have been collected, after the data selection process, 10 scientific articles are determined to be used. After the process of identification, screening, elimination, the journals that have been collected are shown in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Research</th>
<th>Types of research</th>
<th>Subjects Penelitian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gutiérrez &amp; Tomás (2019)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>2</td>
<td>Arlinkasari &amp; Akmal (2017)</td>
<td>Correlation</td>
<td>College student</td>
</tr>
<tr>
<td>3</td>
<td>Rufaida &amp; Prihatsanti (2017)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>4</td>
<td>Ahmed et al. (2018)</td>
<td>Cross Sectional</td>
<td>College student</td>
</tr>
<tr>
<td>5</td>
<td>Hauck et al., (2020)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>6</td>
<td>Noreen et al. (2018)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>7</td>
<td>Wei et al. (2019)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>8</td>
<td>Damrah (2021)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>9</td>
<td>Azila-ghettor &amp; Abiemo (2020)</td>
<td>Quantitative</td>
<td>College student</td>
</tr>
<tr>
<td>10</td>
<td>Marôco et al. (2020)</td>
<td>Cross Sectional</td>
<td>College student</td>
</tr>
</tbody>
</table>

**Result and Discussion**

In this section, the results of the process of analyzing data from scientific journals that have been collected will be explained, here are some summaries of these journals. The research by Gutiérrez & Tomás (2019) with the title The Role of Perceived Autonomy Support in Predicting University Students' Academic Success Mediated by Academic Self-Efficacy and School Engagement aims to examine the relationship between lecturer (teacher) autonomy and academic success with academic efficacy and involvement as a mediator. The study used a sample of 810 students. The research method used is a quantitative method with data collection tools using the Learning Climate Questionnaire scale made by LCQ, Williams and deci in 1996 and adapted by Jang, Kim, & Reeve in 2012 to measure lecturer autonomy support. The Academic Self-Efficacy Scale was used to measure academic efficacy variables, the scale was made by Midgley et al. in 1998. Meanwhile, to measure learning engagement, Reeve's Student Engagement Scale was used in 2013. Then the data analysis used the Chi Square test as data analysis. The results of his research prove that 1) academic efficacy and student learning involvement predict academic achievement, 2) lecturer autonomy support has a direct effect on academic efficacy and student engagement, 3) student self-efficacy and learning engagement act as mediators in predicting academic performance from positive emotions and autonomy support.

Arlinkasari & Akmal's research (2017) with the title The Relationship between School Engagement, Academic Self-Efficacy and Academic Burnout in Students aims to examine the relationship between student learning engagement and academic efficacy, with academic burnout. The study used a sample of 208 students. The research method used is the correlation method with data collection tools using the Academic Self-Efficacy scale by Zajacova et al. in 2005 to measure students' academic efficacy. School Engagement Scale is used to measure student engagement in learning, the scale was created by Frederick et al. in 2005. Meanwhile, to measure academic burnout, the Maslach Burnout Inventory – Student Survey (MBI-SS) scale was used by Schaufeli et al. in 2002. Then the data analysis using correlation test. The results of his research prove that 1) Academic efficacy and student learning involvement play a role in reducing academic burnout, 2) Academic efficacy is significantly positively related to school engagement (r=0.495; p<0.00). That is, when students are confident in their academic abilities, learning engagement increases. 3) Involvement determines academic burnout significantly (r=-
The Role of Academic Efficiency on Student Learning Engagement

0.366; p<0.00). So if students are involved in the lecture process positively, it will keep feelings of academic saturation away.

Rufaida & Prihatsanti's research (2017) with the title Relationship between Academic Self-Efficacy and Student Engagement in Undip FSM Students who Work Part-time aims to examine the relationship between academic efficacy and student engagement in learning. The study used a sample of 60 students. The research method used is a quantitative method, with data collection tools using an academic efficacy scale which is based on aspects of academic efficacy according to Bandura to measure students' academic efficacy abilities. The School Engagement scale is used to measure student learning engagement, the scale was created by Betts et al. in 2010 which was adapted by Prihatsani in 2016. Then the data analysis used a simple regression test. The results of his research prove that the results of simple regression analysis show a correlation coefficient of rxy = .544 with a value of p = .000 (p<.001). The correlation coefficient proves that there is a significant relationship between academic self-efficacy and student engagement.

Research by Ahmed et al. (2018) with the title Examining The Links Between Teachers Support, Academic Efficacy, Academic Resilience, and Student Engagement in Bahrain aims to examine the relationship between teacher support (lecturers), academic efficacy, academic resilience and learning engagement. The study used a sample of 350 students. The research method used is the Cross Sectional method, with data collection tools using survey tools made by the researchers themselves. Then analyze the data using equation modeling (SEM). The results of his research prove that academic efficacy and academic resilience have a positive impact on learning engagement.

Hauck et al., (2020) research entitled Assessing First-Year Seminar Performance with College Engagement, Academic Self-Efficacy, and Student Achievement aims to examine the moderating effect of lecturer support on academic efficacy and learning engagement. The study used a sample of 350 students. The research method used is the Cross Sectional method, with data collection tools using survey tools made by the researchers themselves. Then analyze the data using equation modeling (SEM). The results of his research prove that academic efficacy and academic resilience have a positive impact on student learning engagement.

Research Noreen et al. (2018) entitled The Impacts of Academic Self-Efficacy on Academic Outcomes: The Mediating effect of Student Engagement aims to examine the impact of academic efficacy on academic outcomes mediated by learning engagement. The study used a sample of 169 students. The research method used is a quantitative method, with data collection tools using the College Academic Efficacy Scale created by Owen & Frowman in 1998 to measure academic ability. The Student Course Engagement Questionnaire (SCEQ) scale was used to measure the ability to engage in learning, the scale was developed by Handalsman et al. in 2005. Then the data analysis using multiple regression test. The results of his research prove that academic efficacy affects student learning engagement well and learning engagement affects academic results. This means that academic efficacy affects academic results directly or indirectly through learning involvement.

The research of Wei et al. (2019) with the title An Investigation of Academic Self-efficacy, Intrinsic Motivation and Connected Classroom Climate on College Students' Engagement in Blended Learning aims to examine the relationship between academic efficacy, intrinsic motivation, and classroom climate on learning engagement in blended learning. The study used a sample of 85 students. The research method used is the mixed method method, with data collection tools made by researchers. Then the data analysis using multiple regression test. The results of his research prove that academic self-efficacy, intrinsic motivation, and classroom climate simultaneously affect student learning engagement.
Damrah's research (2021) with the title Self-Assertiveness and the relationship with Academic Self-Efficacy and Student Engagement of Jordanian Students: A Descriptive, Correlational Study aims to examine the relationship between self-assertiveness, academic efficacy, and learning engagement. The study used a sample of 35 students. The research method used is a quantitative method, with data collection tools using the Rhabatus Assertiveness Scale (RAS) created by Rhabatus in 1973 to measure self-assertiveness. The Self-Efficacy Scale was used to measure academic efficacy, which was made by Chen, Gully, & Eden in 2001. Meanwhile, to measure learning engagement, the Student Engagement Scale was used which was created by Gunuc & Kuzu in 2014. Then the data analysis used a test t. The results of his research prove that there is a positive correlation between academic efficacy and learning engagement, as well as a positive correlation between self-assertion and self-efficacy.

Azila-ghettor & Abiemo (2020) research entitled Moderating Effect Of Perceived Lecturer Support On Academicself-Efficacy And Study Engagement: Evidence from a Ghanaian University aims to examine the moderating effect of lecturer support on academic efficacy and learning engagement. The study used a sample of 376 students. The research method used is a quantitative method, with data collection tools using the Academic Self-Efficacy scale created by Row botham & Schimtz in 2013 to measure academic efficacy abilities. The Study EGagement scale is used to measure learning engagement, the scale was created by Schmitz in 2013. Meanwhile, to measure lecturer support, the Perceived Lecrurer Support scale was made by Miklikowska et al. in 2019. Then analyze the data using PLS - SEM. The results of his research prove that academic efficacy and lecturer support are positive predictors of learning engagement.

The research of Marôco et al. (2020) with the title Predictors of Academic Efficacy and Dropout Intention in University Students: Can Engagement Suppress Burnout? aims to examine the predictors of academic efficacy and dropout intentions in students, and whether learning engagement can reduce student burnout behavior. The study used a sample of 4,061 students. The research method used is the Cross Sectional method, with data collection tools using the Maslach Burnout Inventory Student Survey (MBSI-SSI) scale to measure burnout behavior and academic efficacy. The Social Support Satisfaction Scale (ESSS) was used to measure the perceived social support of students. The University Student Engagement (ESEI) scale is used to measure the ability of student engagement to learn. Then data analysis using confirmatory factor analysis (CFA). The results of his research prove that 1) Burnout is related to inefficacy, 2) Burnout is a good predictor of student dropout intentions, 3) Burnout suppresses / weakens the ability to engage in learning. 4) learning engagement improves academic performance. In conclusion, inefficacy (the opposite of efficacy) has a bad effect on student engagement, and student learning involvement has a good effect on academic performance.

From the process of analysis of various scientific articles that have been collected, it generally describes that academic efficacy has a positive role in student learning engagement, meaning that the better the academic efficacy abilities possessed, the better the student engagement abilities, and vice versa. If students' academic efficacy abilities are bad, the ability to engage in student learning will also be bad.

**Conclusion**

This research explains the importance of the ability to engage in learning for students. In developing the ability to engage in learning, academic efficacy skills are needed, because academic efficacy has a positive role in academic efficacy abilities. This study also found that there are various instruments that can be used to measure the ability of academic efficacy and student learning engagement. Instruments can be used according to the needs of the theory used. This study provides an overview of the role of academic efficacy on student learning engagement. Of course, this research cannot be separated from weaknesses, including scientific articles that are collected only for students. Future research is
expected to discuss the role of academic efficacy on learning engagement at all ages, other research methods, and other data collection instruments or tools according to theoretical needs. This will certainly be beneficial for the community, especially in the field of education.

References


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