Self-Efficacy, Religiosity, and Parental Social Support with Undergraduate Students' Self-Regulated Learning in Distance Learning

Muhammad Munandar1*, Lisnawati Ruhaena2
1Universitas Muhammadiyah Surakarta, Indonesia
1mmunandar15@gmail.com, 2ir216@ums.ac.id
*Correspondence

Article Information:
Received March 26, 2023
Revised July 18, 2023
Accepted August 08, 2023

Keywords:
Parental social support
Self-efficacy
Undergraduate students
Distance learning
Self-regulated learning

Abstract
The existence of a pandemic has limited activities all of sectors including education sector. In March 2020, distance learning began to be implemented in Indonesia in which the students experienced problems during the implementation. The sample was undergraduate students (408 students) participating in distance learning. This study is quantitative research with the correlational research design using multiple regression analysis. The Motivated Strategy for Learning Questionnaire (MSLQ) was used to measure self-regulated learning, the General Self-Efficacy Scale (GSES) was used to measure self-efficacy, the Centrality of Religiosity Scale (CRS) was used to measure religiosity, and the parental social support compiled by Fitrotin was used to measure parental social support. The results of the study revealed that self-efficacy, religiosity, and parental social support had a relationship with self-regulated learning. This is indicated by a positive Beta = 8.590, a p-value of 0.001 (p <0.005), a regression (F value) of 97.176, and an effective contribution to self-regulated learning of 41.9%. Programs to increase self-efficacy, religiosity, and parental social support are very important to increase self-regulated learning.

INTRODUCTION
The SARS-CoV-2 is a virus that was first discovered in China. Exposure to the virus makes a person infected by COVID-19. This disease attacks the respiratory system and has a very fast transmission rate (Wang Zhou, 2020). In February 2020, the virus entered Indonesia for the first time. It is known that one of the first victims in Indonesia lived in the Depok area.

The government encouraged public to implement physical distancing and social distancing recommended by World Health Organization (WHO) as health protocol standards and carry out Large-Scale Social Restrictions (LSSR) in various sectors to break the chain of COVID-19 (R. M. Putri dkk., 2020). Regarding the recommendation for implementing physical distancing in the education sector, the Ministry of Education and Culture implemented a policy to conduct an online learning during the pandemic through circular letter number 36963/MPKA/HK/2020 (Kemendikbud, 2020). The decisions issued by the Ministry of Education and Culture are deemed effective in
stopping the spread of COVID-19 (Mahmudah, 2020). It is hoped that this decision will also give students right to attend teaching and learning activities (Sarwa, 2021).

According to (Mittelmeier dkk., 2019), the transition from offline to online learning requires adaptation which leads many students to experience various problems during distance learning. According to the survey conducted by Saiful Munjani Research and Consulting (SMRC), several problems that came up during the implementation of distance learning are caused by lack of teacher guidance, internet connection constraints, and less conducive environment. The researchers also conducted preliminary research by distributing an open questionnaire (google form) to students participating in distance learning. The preliminary research result showed that there were 95 (83%) of the 114 students experiencing obstacles in distance learning. These obstacles were feeling insecure as they had to study online, less enthusiastic, lack of intense assistance from lecturers, and issues related to networks or gadgets.

Regarding aspect of self-regulated learning, (Pintrich & A, 1991) investigated learners’ motivation and learning strategies. In terms of motivation, the results revealed that during the learning 19 of 95 learners (20%) experienced lack of enthusiasm, sleepiness, stress, lack of motivation, laziness and tiredness. In the aspect of learning strategy, 76 of 95 learners (80%) encountered several problems in allocating time, being focus and concentrate, signal/connection issue, poor self-management, conduciveness of learning environment, and understanding the material. They were also unproductive. Moreover, they could not learn by themselves, and they could not discuss with friends.

The prior presented data shows that individuals (participants) need strategy management skills which assist them to overcome the emerged obstacles - during their attendance in distance learning- using the skills. Online learning obligates students to be smart in managing learning strategies which may help them to deal with existing challenges. In line with the previous idea, (Sutikno, 2013) stated that students are expected to have a self-regulation to direct themselves in learning and cope with difficult tasks during the distance learning period.

Pertaining to perspective of social cognition theory, the concept of reciprocal determinism refers to a reciprocal causal relationship that influence each other. Self-regulated learning is individuals capability to organize and monitor learning objectives; and regulate themselves (cognition, motivation, and behavior) to achieve learning goals (Carter dkk., 2020). The application of self-regulated learning on undergraduate students may allow them to achieve academic goals systematically and independently (Amelia & Taufik, 2021). Reciprocal determinism of individual behavior includes self-regulated learning which is influenced by personal and environmental factors.

Bandura (1999) stated that the personal factors comprise of cognitive, affective, and biology. In the cognitive process, individuals set beliefs about what can be done to set goals to be achieved (Bandura, 1997). The role of self-efficacy is indispensable to increase self-regulation in one's learning (Adicondro & Purnamasari, 2011a). Self-
efficacy is an individual's ability to accomplish some studies and to control behavior through self-confidence in achieving optimal academic goals.

Person who has good self-efficacy will be able to perform tasks or learn objectives optimally (Amelia & Taufik, 2021). According to (Bandura, 1989), self-efficacy has three aspects, namely level, strength, and generalization. The findings of previous research by (Alegre, 2014) and (Afifah, 2017) found a positive correlation between the two variables, with 0.650 and 0.842, respectively. Several previous studies also show the similar results (Adicondro & Purnamasari, 2011b; Agustiani dkk., 2016; Amelia & Taufik, 2021; Barizah, 2020; Brown dkk., 2016; Efendi dkk., 2020; Fadhilah dkk., 2017; Kembang & Jagad, 2018; Kusumawati & Cahyani, 2017; Lee dkk., 2020; Li & Zheng, 2018; H. Putri, 2012; Yudha & Nugroho, 2019).

According to (Prasetyana & Mariyati, 2020), cognitive process within a person can also be influenced by standards originating from references (i.e., values or norms contained in religion). Besides that, (Nashori, 1999) stated that self-regulated learning and the role of spiritual values are indivisible; it is said in religious values that one should not give up on learning. *Certainly, no one despairs of Allah’s mercy, except the people who disbelieve* (QS Yusuf, 12 verse 87). The above quotation proves that the role of religiosity can provide a religious reference for someone to be able to regulate himself in his study.

Self-regulation in learning and the role of religiosity are inseparable which is about the extent to which individuals believe in their religion and implement the religion values into daily life (McCullough & Willoughby, 2009a). Religiosity has five dimensions. namely (1) ideology, (2) public practice, (3) religious experience, (4) intellectual, and (5) personal practice (Huber & Huber, 2012). Previous research conducted by (Prasetyana & Mariyati, 2020) found a positive correlation between these two variables with a value of 0.720.

The environmental factor in this study is parental social support. The problems of self-regulated learning can be overcome through assistance from the social environment. (Meichenbaum, 1976) stated that good self-regulated learning is shaped by influence of social resources (i.e., components exist in the student’s environment) such as parents, family members, or teachers.

Self-regulated learning cannot be separated from the role or parents’ support towards their children in achieving learning goals ((Ikhwaniukirom, 2017). According to (Hariseno, 2012), receiving parental support will give undergraduate students experience of getting attention in the form of advice and appreciation. This condition brings forth feeling helpful which encourage the students to achieve their learning targets or goals. Previous research done by (Sari dkk., 2017) and (Farooq Muhammad Shahid & Asim Iqra, 2020) found a positive correlation between the two variables, namely self-regulated learning and parental social support, with values of 0.445 and 0.705, respectively.
The previous research found a positive relationship between each variable of self-efficacy, religiosity, and parental social support with self-regulated learning in face-to-face learning. However, similar research in the context of distance learning is still rare. In addition, the correlation of self-efficacy, religiosity, and parental social support variables with self-regulated learning has never been studied simultaneously. This research aimed to examine whether between self-efficacy, religiosity, and parental social support; and self-regulated learning owned by undergraduate students who carried out distance learning during the COVID-19 pandemic had a positive relationship or not. The hypothesis proposed by the researchers in this study was that there was a positive relationship between self-efficacy, religiosity, and parental social support with self-regulated learning in undergraduate students who carried out distance learning during the COVID-19 pandemic.

METHOD
This is quantitative research with correlation research design involving undergraduate students as the population. The sampling technique used was simple random sampling. In selecting the sample, the researchers used infinite population with an error rate of 5% (Isac and Michael as cited in Sugiyono, 2017). The participants of this research were 408 undergraduate students.

This study used a scale as a data collection instrument. Regarding the self-regulation scale in learning, the researchers modified MSLQ scale developed by Pintrich (1991) into a short version and it was translated by (Nindyah & Siswanto, 2019). This scale consists of sixteen items which comprise of motivation and learning strategies. The validity test result of each aspect was in a range of 0.78-0.92. Moreover, the reliability coefficient was 0.868.

The self-efficacy scale used was the GSES developed by (Jerussalem & Schwarzer, 1995) and has been adapted and modified by (Teo & Kam, 2014). This scale consists of ten items of three aspects, namely magnitude, strength, and generality. The validity test result of each aspect was in a range of 0.78-0.96. In addition, the reliability coefficient was 0.878.

Regarding the religiosity scale in this study, the researchers modified the CRS scale developed by Huber (2012) into a short version and it has been adapted by Purnomo & Suryadi (2018). This scale consists of fifteen items of five dimensions, namely ideology, public practice, religious experience, intellectual, and private practice. The validity test result of each aspect was in a range of 0.82-0.92 and the reliability coefficient was 0.855.

The social support scale used this study was modified from the scale developed by Fitrotin (2017). This scale consists of twelve items comprise of four aspects, namely instrumental support, emotional support, appraisal support, and informative support. The validity test result of each aspect was in a range of 0.82-0.92. In addition, the reliability
coefficient was 0.883. The regression model used in this study was multiple regression analysis using the SPSS Statistics 22 program.

RESULTS

Based on the data analysis results, it was found that the median value of self-regulated learning variables was 48.00, self-efficacy was 31.00, religiosity was 53.00, and parental social support was 36.00. The following table shows the results of the categorization. Based on Table 1, it can be concluded that most of the participants have self-regulated learning, self-efficacy, religiosity, and parental social support in the high category.

Table 1
Variable Categorization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSO</td>
<td>Self-Regulated Learning (SRL)</td>
</tr>
<tr>
<td>R</td>
<td>Self-Efficacy (SE)</td>
</tr>
<tr>
<td>SE</td>
<td>Religiosity (R)</td>
</tr>
<tr>
<td>SRL</td>
<td>Parental Social Support (PSO)</td>
</tr>
</tbody>
</table>

The basic assumption test was used as a prerequisite before testing the hypothesis. Through tests of normality, linearity, multicollinearity and heteroscedasticity, it was found that the data met the prerequisite tests and was analyzed using parametric tests. The parametric test used was a multiple linear regression test. The results of the linear regression test between each of self-efficacy, religiosity, parental social support; and self-regulated learning showed a positive value of Beta (8.590), p-value 0.000 (p <0.005), F regression 97.176, R 0.647, and R square 0.419 (41.9%). It can be concluded that self-efficacy, religiosity, and parental social support have correlation with self-regulated learning, with a correlation value 0.647 and an effective contribution 0.419 (41.9%). The results of the partial hypothesis test showed a significance value 0.00 (p<0.005) for each independent variable and the dependent variable. It can be concluded that self-efficacy,
religiosity, and parental social support partially related to self-regulated learning. Self-efficacy and SRL have a correlation value 0.560, religiosity and SRL have a correlation value 0.472, and parental social support and SRL have a correlation value 0.424. The results of hypothesis test are presented in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model</th>
<th>r</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE, R, PSO – SRL</td>
<td>1</td>
<td>-</td>
<td>0.647</td>
<td>0.419</td>
<td>0.415</td>
<td>97.176</td>
<td>0.000</td>
</tr>
<tr>
<td>SE – SRL</td>
<td>0.560</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>R - SRL</td>
<td>0.472</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td>PSO – SRL</td>
<td>0.424</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Description:
Self-Regulated Learning (SRL)
Self-Efficacy (SE)
Religiosity (R)
Parental Social Support (PSO)

The effectivity contribution of each variable can be analyzed by calculating the values of cross-multiply coefficient, coefficient, cross-multiply and regression (Muhid, 2019). The formula calculation is presented below:

\[
SEX_i = \left( \frac{b_x \times \text{crossproduct} \times R^2 \times \text{Regression}}{\text{Regression}} \right) \times 100 
\]

Description:

- \(SEX_i\) = Effective contribution of variable
- \(b_x\) = Variable Coefficient (B)
- \(\text{CP}\) = Cross-product variable \(X_i\)
- \(R^2\) = Regression Value
- \(\text{Regression}\) = Total effective contribution

The contribution calculation of the independent variable to SRL shows that the self-efficacy variable has an effective contribution to SRL (21.3%). The religiosity variable has an effective contribution to SRL (10.7%). The parental social support variable has an effective contribution to SRL (9.9%). The results of calculating the effectivity of variables’ contribution can be seen in Table 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (B)</th>
<th>Cross Product</th>
<th>Regression</th>
<th>Effective distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE – SRL</td>
<td>0.544</td>
<td>1727.103</td>
<td>5471.041</td>
<td>21.3 %</td>
</tr>
<tr>
<td>R – SRL</td>
<td>0.275</td>
<td>5081.779</td>
<td></td>
<td>10.7 %</td>
</tr>
</tbody>
</table>
DISCUSSION

The results of prior analysis data answered the questions of this study. First, the relationship between each of variables (i.e., self-efficacy, religiosity, parental social support) and self-regulated learning in undergraduate students were found positive. This phenomena can be explained by the concept of reciprocal determinism which was initiated by (Bandura, 1989). Causal relationship between the variables (self-efficacy, religiosity, parental social support) and self-regulated learning influences each other. This concept explains that a person behaves based on personal and environmental dimensions (Latipah, 2010).

The personal factors in this study are self-efficacy and religiosity. According to (Cuiyan dkk., 2020) individuals need the role of cognitive process. This role is strongly needed because cognition is the driving force of behavior. Because of this, the cognitive process plays a very important role in learning carried out by someone (Pahliwandari, 2016). In addition, according to (Wang dkk., 2020), self-efficacy determine self-regulated learning due to a person's cognitive process. Efficacy is a person’s belief or trust in his ability to organize or carry out learning tasks (Masruroh dkk., 2019).

Someone who has good self-efficacy and self-regulated learning will help themselves in their learning process to produce good learning performance. Conversely, when a person does not have good self-efficacy and self-regulated learning, he/she will find difficulty(is) to carry out the learning process to achieve the best results (Bandura, 1989; Barizah, 2020; Efendi dkk., 2020). In research conducted by (Laksono, 2019) found that self-efficacy is one of the supporting factors influencing self-regulated learning.

Cognitive process within a person can be influenced by individual expectations of results or outcome experiences (Melsani, 2018). This expectation, part component of a person's cognitive process, related to one's goals, morals, and standards which are used to judge whether a behavior is appropriate or not (Cuiyan dkk., 2020). According to
(Prasetyana & Mariyati, 2020), individuals can also refer to a standard that comes from references, values or norms contained in their religion, such as the hadith quote below:

"As a Muslim, seeking knowledge is an obligation" (HR. Ibnu Majah no.224)

When someone has set religious references or norms as standard, such as the hadith quoted above, he/she will understand the importance of taking learning seriously. In addition, (Nashori, 1999) stated that the relationship between religiosity and self-regulation in learning has been mentioned in religious norms. So that a person should not give up on his/her study. Even when someone has problems, he/she must be able to find strategies to overcome problems in his/her learning. According to (Jalaluddin, 2001), religiosity is a person's belief and ability to understand, appreciate and implement religious values contained by his/her religion on daily life.

(Melsani, 2018) stated that when a person can increase the level of religiosity within himself, he will form a good individual character because he places the religion as a guideline in his life (religious reference). By doing so, a person will be able to control his/her actions so that he/she can achieve his/her goals. According to (McCullough & Willoughby, 2009b), self-regulated learning is influenced someone's religiosity as a person's belief in their religion.

The environmental factor in this study is parental social support. Person’s inability to regulate himself in learning is caused by the lack of social support from parents because they are the people (component) who spend most of the time with their children. Meichenbaum (Ikhwanulkirom, 2017) stated that good self-regulated learning is built due to social resources, i.e., components in a student environment. These components influence self-regulated learning owned by someone through what they give (attention, physical and financial support, and parental advice). This is in line with the opinion of (Fisher, 1998) which claim that self-regulation in learning requires the role of social support. Children need social support from parents through appreciation, emotional, and appliance support.

Emotional support will comfort children and cherish them during their learning. Support in the form of appreciation will embolden someone because he/she feels valued in every process or as someone's reward. Likewise, support in the form of equipment will help individuals to carry out the learning process as they get supporting facilities to assist them in the learning process (Aziz, 2016; Sarafino, 1998). Various forms of support from parents develop children’s self-regulated learning thus they can manage their learning process by which the good learning performance is expected to be achieved (Lubis, 2018).

In general, the overall findings of this study in line with the concept of self-regulatory mechanism mentioned by Bandura (1997), that is reciprocal determinism or reciprocal interactions between interrelated determinants of behavior, personality, and...
environment. Regarding reciprocity of individual behavior, self-regulated learning correlates with personal and environmental factors. The personal context consists of self-efficacy and religiosity, while the environmental context involves parental social support.

The practical implication of this research is realization of undergraduate students of self-regulated learning urgency as a part of the success in carrying out distance learning, so it needs to be optimized. Undergraduate students will find various problems in participating distance learning. Hence, they need to regulate themselves, their thoughts, feelings, and behavior to achieve learning goals. Self-efficacy is one of the biggest factors which has contributions to develop self-regulated learning. Therefore, undergraduate students can use self-efficacy to regulate themselves when carrying out distance learning. Self-regulated learning and both of the role of religiosity and parental social support are inseparable. In other words, both of them are needed by students to achieve optimal learning goals.

CONCLUSION

This research aimed to examine the relationship of three variables (self-efficacy, religiosity, and parental social support) with self-regulated learning in undergraduate students during distance learning. The study results showed that there was a simultaneous positive role of self-efficacy, religiosity, and parental social support on self-regulated learning of undergraduate students during distance learning. This also proves that the role of self-efficacy, religiosity, and parental social support also support undergraduate students’ self-regulated learning during their participation in distance learning. The three independent variables in this study (self-efficacy, religiosity, and parental social support) can simultaneously explain the self-regulated learning variable by 41.9%.

This study has several limitations. First, this study only used non-experimental methods. Therefore further research using experimental method to test causality is needed. Second, the implementation of the simple random sampling technique in this study could have been better due to some obstacles, such as the enormous of data population. The future research which use this technique perfectly is expected. In addition, post-pandemic research as a follow up of this research is recommended as well.
REFERENCES


Barizah, F. (2020). Pengaruh Efikasi diri terhadap regulasi diri mahasiswa yang menghafalkan al-quran di HTQ UIN MALANG. *Journal Psikologi UIN.*


Malahayati. ANFUSINA: Journal of Psychology, 3(1), 21–32. https://doi.org/10.24042/ajp.v3i1.6046


