The Effect of Learning Facilities on Learning Outcomes and Religiosity as a Moderator in Students STAI Al-Ghazali Bulukumba

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Abstract. This study aims to look at the factor of religion in moderating learning facilities on learning outcomes. The study used quantitative methods, with a research sample of 100 people. Data were collected using questionnaires. The analytical technique applied in this study is modeling structural equations using smartPLS software. The results of statistical analysis confirm that the variables of learning facilities and the combination of moderation of learning facilities religiosity has an important role in influencing student learning outcomes, while religiosity directly does not have a significant effect on learning outcome variables.

Keywords: Learning Facilities, Learning Outcomes, Religiosity.

1   Introduction

Higher education is an important stage in the educational journey that has a central role in shaping individuals into competent individuals who have deep insights in various scientific fields. During the increasingly dynamic development of the world of education, improving the quality of the teaching and learning process is the focus of higher education institutions. One external factor that is believed to have a significant effect on student learning outcomes is learning facilities [1].

Learning facilities, including the availability of comfortable rooms, access to learning equipment and resources, and a supportive environment, are considered important components in creating an effective and enjoyable learning experience for students. These factors can affect the level of motivation and concentration of students during the learning process [2].

According to [3], facilities and infrastructure refer to important elements, including learning spaces and environments, media or learning aids, and learning facilities to

support the learning process. Learning facilities refer to all the needs needed by students so that the learning process at school takes place more easily, smoothly, and supports so that students can learn optimally. These facilities can be in the form of school buildings and equipment used in learning activities. This learning facility acts as a supporting tool to achieve optimal learning outcomes for students [4].

According to Marhamah et al[2] learning facilities are divided into two main components, namely learning facilities and infrastructure. Learning facilities refer to all devices, equipment, materials, and furniture that are directly used in the educational process. Examples of learning facilities include stationery, learning media, and teaching aids used in teaching and learning activities. Meanwhile, infrastructure refers to all basic facilities and equipment that are not directly involved in the teaching and learning process, but strongly support the implementation of education. Examples of infrastructure include classrooms, laboratory rooms, library services, and toilet facilities that are essential for learning comfort and success.

Learning facilities play an important role as extrinsic factors that affect student learning motivation. Learning facilities include media or learning aids, learning equipment, and study rooms. Good learning facilities can increase student motivation [4]. Meanwhile, problems in learning can arise if students do not have a special place to study at home, such as studying in the kitchen, in the living room, or in bed. Therefore, it is important to provide adequate learning facilities so that students can learn more effectively and be motivated.

Indicators of student success during the higher education process can be assessed from their academic achievement, which is reflected in the Grade Point Average (GPA). There are a number of factors that have a significant influence on the achievement of learning achievement, internal (intrinsic) and external (extrinsic) factors, including learning facilities and student motivation levels[5].

In addition to external factors, religiosity, which is an internal factor also has a significant role in shaping students' mindsets and attitudes towards education [6]. Education in institutions based on religious values often emphasizes the development of strong moral and ethical values. Therefore, students' religiosity can also moderate the influence of learning facilities on their learning outcomes [7]. Religiosity refers to how individuals express the religious dimension they profess in their deeds and actions [8]. Religion provides guidelines and obligations to be carried out, which aim to connect and benefit individuals or groups in relation to God, fellow human beings, and the surrounding environment[7], [9].

A person's religiosity not only spans one dimension, but also involves many different aspects. There are five dimensions of religiosity or religiosity, including: 1) the dimension of belief (ideological), 2) the dimension of religious practice (ritualistic), 3) the dimension of experience (experience), 4) the dimension of knowledge (intellectual), 5) the dimension of practice (consequences) [10], [11]. Religious values are values that give direction and guidance to a person to perform positive actions and give confidence to oneself that any process based on religious values will produce optimal results [12]. According to research conducted by Setiawan et al., [13] religious values have the potential to inspire increased psychological awareness, which in turn can help a person find a clearer direction and purpose in life. With a clear direction, one will be able to

determine the focus of goals, including in determining learning objectives to obtain optimal learning outcomes [14].

Many studies have made religiosity as a predictor variable, but there are still limited studies that use religiosity as a mediator variable that can have the effect of strengthening or weakening the relationship between endogenous variables and exogenous variables. In this study, the influence of learning facilities on learning outcomes was mediated by religiosity. The role of religiosity as a factor in this change includes whether it strengthens or weakens the relationship between learning facilities and learning outcomes.

This study aims to explore and understand the influence of learning facilities on student learning outcomes at STAI Al Ghazali Bulukumba, as well as how religiosity can act as a moderator in the relationship between learning facilities and student learning outcomes. Thus, this research will provide a deeper understanding of the factors that influence student learning outcomes, as well as their implications for the design and improvement of learning facilities in universities based on religious values. This research is relevant and important to do considering that STAI Al Ghazali Bulukumba is an educational institution that has a vision and mission based on religious values. In this context, the influence of learning facilities on student learning outcomes and how religiosity can moderate them is a strategic question that must be answered. With a better understanding of these factors, educational institutions can take more effective action in improving student learning experiences and academic outcomes.

2   Methods

This study uses a quantitative approach with the aim of determining the effect of learning facilities on student learning outcomes with moderate religiosity variables. With a research sample of 100 people who are students of the Islamic religious education study program class of 2021. The data collection process was carried out using a questionnaire in the form of questions containing a Likert scale with 1-5. Operational definitions of research variables in the following table:

Table 1. Operational Variables

Variable	Definition	Indicators	Scale
Learning Facilities [3], [5]	The overall condition of a person is what makes him ready to give a response / answer in the learning process	1. Availability of Safe and Comfortable Physical Space 2. Availability of Learning Tools and Equipment 3. Availability of Learning Materials 4. Facility Accessibility	Ordinal

| Variable	Definition	Indicators	Scale
		5. Teacher Qualifications and Support 6. Availability of Supporting Facilities 7. Quality of Learning Environment 8. Availability of Additional Resources	
Religiosity [14]–[16].	Appreciation and implementation of religious teachings in everyday life by applying them in daily actions and attitudes in learning activities.	1. Dimension of belief 2. Dimensions of worship 3. Appreciation dimension 4. Dimensions of religious knowledge 5. Dimensions of effects or practices	Ordinal
Learning Outcomes[17], [18]	Changes in students' attitudes and behavior after receiving a learning experience	1. Intellectual skills, 2. Cognitive strategies 3. Behavioral attitudes 4. Verbal information 5. Motor skills	Ordinal

The collected data is analyzed with Smart PLS software version 3.0 with the following steps. Outside model testing is a process that includes determining how each indicator relates to the latent variable they represent. In other words, it is the step where we explain how the indicator describes or measures the latent variable, which is in the study [19].

Convergent validity is measured by looking at the value of factor loading between the latent variable and its indicator. The expected factor loading value in convergent validity is greater than 0.7 [20]. Discriminant validity is measured by comparing factor loading values between constructs that are desired to be distinguished from other constructs in the study. To determine whether the discriminant validity is adequate, we

need to look at the value of the loading factor. The factor loading value on the desired construct must be greater than the factor loading value on the other construct. Average Variance Extracted (AVE). assess the extent to which indicators in constructs can explain construct variability. AVE measures how well the indicator measures or reflects a construct with a value of > 0.5 [21].

Composite Reliability. The measure used to measure the extent to which the construction in the study had a high degree of reliability. Data that have a composite reliability (CR) greater than 0.7 can be considered to have high reliability. This shows that the construct is measured well and consistently by its indicators [22]. Measurement of the structural model (inner model) is a test of the relationship between latent variables or constructs in the research model. At this stage, statistical analysis is carried out to understand and test the extent to which conceptual models have been built to test research hypotheses and see to what extent the relationship between latent variables is significant and in accordance with the proposed theory.

Figure 1.
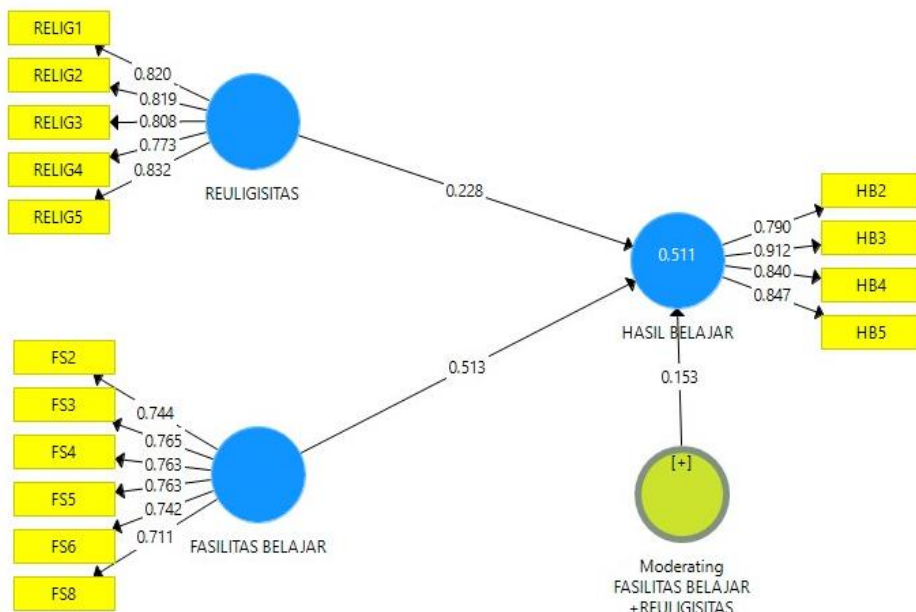
3   Results

This study aims to revive enthusiasm for learning among children living in suburban areas by adopting authentic learning methods. To achieve the aforementioned objectives, three research questions (RQ) are pursued, namely:

R.Q.1. How do teachers meet the educational needs of marginalized children in schools?

R.Q.2. What is the curiosity of RBCS in an authentic learning approach?

Table 2. Convergent Validity of Outer Models

Variable	Indicators	Loading Factor	AVE	Cronbach Alpha	Composite Reliability
Learning Facilities	FS2	0.744			
	FS3	0.765			
	FS4	0.763	0.560	0.844	0.884
	FS5	0.763			
	FS6	0.742			
	FS8	0.711			
Religiosity	RELIG1	0.820			
	RELIG2	0.819			
	RELIG3	0.808	0.657	0.870	0.906
	RELIG4	0.773			
	RELIG5	0.832			
Learning Outcomes	HB2	0.790			
	HB3	0.912	0.720	0.869	0.720
	HB4	0.840			
	HB5	0.847			
Moderating Religiosity Learning Facilities	MDR	1.063	1.000	1.000	1.000

The test results of the outer model show that all indicators have a loading factor value> 0.7. AVE value> 0.5, Cronbach alpha value> 0.7 and composite reliability value> 0.6 so that Construct Reliability and Validity are met.

Table 3. Discriminant Validity Model Beyond the *Forenell-Lacker Criterion*

Variable	Learning Facilities	Learning Outcomes	Moderating Learning Facilities + Religiosity
Learning Facilities	0.748		
Learning Outcomes	0.679	0.849	
Moderating Learning Facilities + Religiosity	0.076	0.198	1.000

The results of the Fornell-Larcker Criterion test show that the AVE value of the root of each variable is greater than the correlation of AVE with variables so that with other variables so that there is Discriminant Validity [23].

**Table 4.** Discriminant Validity via *Heterotrait-Monotratite (HTMT)*

Variable	Learning Facilities	Learning Outcomes	Moderating Learning Facilities + Religiosity
Learning Facilities			
Learning Outcomes	0.773		
Moderating Learning Facilities + Religiosity	0.120	0.212	
Religiosity	0.803	0.646	0.086

Based on the data, the discriminant validity of the HTMT approach, the threshold value is determined using HTMT with the value proposed by [24] of 0.9 so as to meet the discriminant validity.

Structural model testing (inner model) involves assessing the model through measuring the R-Square value, which is an indicator to measure the extent to which the model fits or matches the data used. In other words, R-Square is used as a goodness-fit model test to check the extent to which the conceptual model fits into existing data [23].

Significance assessment by looking at the value of the parameter coefficient and the statistical significance t result in the Boostrapping Algorithm – Path Coefficient report. In this case, we observed whether the t-statistic value was greater than the predetermined t-table value of 1.96 at a significance level of 5%.

Figure 2. Inner Model
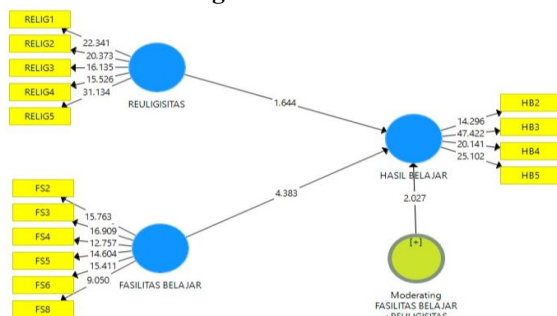
The R Square value is 0.496. showed that, after considering the complexity of the model, about 49.6% of the variation in learning outcomes can still be explained by the model in the study in other words, the variable learning outcomes are influenced by the variable of learning facilities, rehabilitation has a moderate category in explaining this influence and the remaining 50.4% cannot be explained by this research model. Cross-validation redundancy data (Q2) is greater than 0 which indicates that the model has a prediction value that matches the model [25] so it can be concluded that this model also has a good ability to predict the suitability of the model with research data, with a Q2 value of 0.334.

Table 6. *Path Coefficient*

| Variable	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	T Statistics	P Value	Conclusion
Learning Facilities -> Learning Outcomes	0.513	0.507	0.117	4.388	0.000	Important
Moderating Religiosity Learning Facilities -> Learning Outcomes	0.153	0.155	0.076	2.005	0.045	Important
Religiosity -> Learning Outcomes	0.228	0.240	0.136	1.675	0.094	Insignificant

Hypothesis 1, learning facilities have a positive effect on learning outcomes and are significant. A t-statistic value of 4.388 and a very small P value (0.000) indicate that this relationship is very statistically significant. In other words, the existence of learning facilities has a strong influence on learning outcomes.
Hypothesis 2, religiosity has no statistically significant impact on learning outcomes, a t-statistic value of 1.675 and a P value of 0.094 indicate that this relationship has not been shown to be statistically significant. In this context, there is not enough evidence to support the influence of strong religiosity on learning outcomes.
Hypothesis 3, Moderated Regression Analysis (MRA) on learning outcomes, In this connection, we see that the combination of variables "moderate learning facilities and religiosity also has a significant impact on learning outcomes." A t-statistic value of 2.005 and a P-value of 0.045 indicate that this relationship is also statistically significant, although this level of significance is lower than the former. This shows that the combination of these factors has a significant influence on learning outcomes. This shows that religiosity is a moderate variable that can provide strengthening of learning facilities to the learning outcomes of STAI Al-Ghazali Bulukumba students. Thus, the

results of statistical analysis show that the variables of learning facilities and the combination of moderation of learning facilities + religiosity "play an important role in influencing learning outcomes," while religiosity directly does not have a significant effect on learning outcome variables.

Figure 3. Simple Slope Analysis
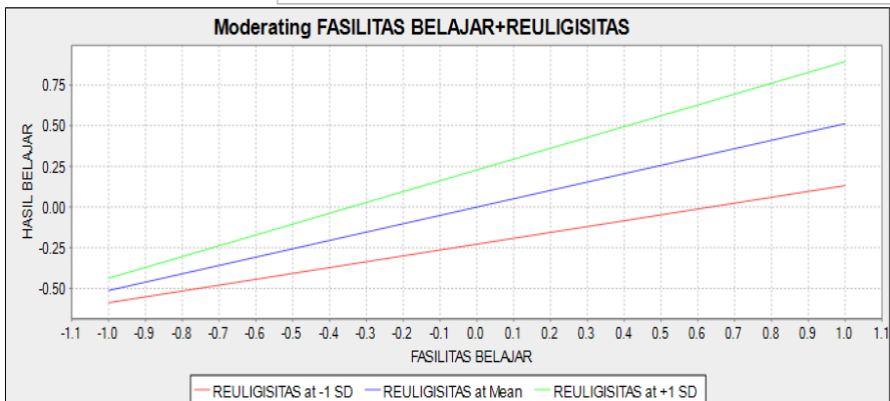
Simple slope analysis shows that the three lines are parallel to each other, which shows that religiosity has a role as a moderating variable of learning facilities on learning outcomes. In other words, students with high religiosity with learning facilities will be able to improve learning outcomes.

4   Discussion

In this study, the first hypothesis states that learning facilities have a positive impact on learning outcomes and this impact is statistically significant. The results of statistical analysis showed that the t value obtained was 4.388. This t-value indicates the extent of the relationship between learning facilities and learning outcomes measured in this study. The higher the t-value, the stronger the relationship between the two variables. In this case, a high t-value indicates that there is a positive relationship between the available learning facilities and the learning outcomes achieved by the individual or group studied.

In addition, the P value obtained is smaller than 0.05, which is 0.000. This P value indicates the degree of statistical significance of the observed relationship. The smaller the P value, the greater the confidence that the relationship did not happen by chance. In this context, a very small P value confirms that the relationship between learning facilities and learning outcomes found in the research sample is statistically significant. Thus, the conclusion that can be drawn from this analysis is that learning facilities have a strong and positive impact on learning outcomes. This means that the better the learning facilities available, the better the learning outcomes that can be achieved by individuals or groups who are the subject of research. These results provide strong support for the first hypothesis, which states that learning facilities have a positive and significant effect on learning outcomes in this study, and this also has important

implications in the educational context. These results provide a basis that to improve student learning outcomes, adequate learning facilities such as educational facilities such as well-equipped libraries, good laboratories, comfortable classrooms, adequate technology, and so on can help improve the quality of education. Good educational facilities can provide the necessary support for students to learn more effectively. Students who have access to adequate educational facilities tend to have a more conducive environment for learning, which can contribute to their learning achievement [2].

In this study, after statistical analysis of the relationship between religiosity scores and learning outcomes, the results showed that there was not enough statistical evidence to state that religiosity scores had a significant impact on learning outcomes. In simple terms, this means that the relationship between these two variables cannot be considered statistically significant.

Value is obtained from statistical analysis. The resulting t value is 1.675, and the corresponding P value is 0.094. A t value lower than the critical t value indicates that the relationship does not have strong statistical significance. Furthermore, a P value greater than the significance level of 0.05 indicates that there is insufficient statistical evidence to support a strong association between religiosity scores and learning outcomes in this study sample.

In other words, although there was an association between religiosity scores and learning outcomes, the association was not statistically strong enough to be considered a significant influence. That is, in this study sample it cannot be concluded that religiosity scores have a real effect on learning outcomes. In addition, these findings highlight the importance of understanding that other variables or additional factors may also play a role in explaining learning outcomes, aside from religiosity scores.

The third hypothesis in this study involves regression analysis with the use of moderator variables, namely "moderation of learning facilities and religiosity," on learning outcomes. The results of this analysis show that the combination of these two variables has a significant effect on learning outcomes.

The statistical results show a t value of 2.005 and a P value of 0.045. The t value shows the magnitude of the influence of the combination of moderate variables of learning facilities and religiosity on learning outcomes. A low P value, although lower than the first, suggests that this relationship remains statistically significant. This is in line with the research of Waro et al[9] which suggests that religiosity greatly contributes to students' academic achievement.

This means that a combination of "learning facilities and religiosity" factors had a significant influence on learning outcomes in the study. More specifically, these findings show that religiosity acts as a moderate variable that strengthens the relationship between learning facilities and student learning outcomes at STAI Al-Ghazali Bulukumba. This is in line with Susilawati's research[8] that religiosity has the potential to have a positive influence on student achievement motivation. Religious views can play a positive role in relation to students' academic achievement through understanding and belief in their religion. The deeper an individual's relationship with their religion, the smoother they face their educational duties and responsibilities.

Thus, the results of statistical analysis show that the variables "learning facilities" and the combination of "moderate learning facilities + religiosity" have an important role in influencing learning outcomes. This illustrates that there is a significant interaction between these factors in predicting the learning outcomes of STAI Al-Ghazali Bulukumba students, with religiosity reinforcing the positive influence of learning facilities on their learning outcomes. The results of this study are in line with Arsa et al[26] which states that the level of rehabilitation is closely related to the level of learning motivation, even the drive to achieve. Religion, as an expression of one's spiritual maturity, provides a strong motivation to direct behavior, including in the learning process.

The results showed that well-managed learning facilities can have a positive impact on the achievement of student learning outcomes. In addition, this positive influence is also amplified when individual religiosity factors are moderated, meaning a person's level of religiosity can strengthen the link between learning facilities and learning outcomes.

However, the findings also suggest that directly, individual religiosity does not have a significant influence on learning outcome variables, suggesting that the influence of religiosity on learning outcomes is more related to its moderate role in learning facilities than its direct influence.

With good management of learning facilities in the context of higher education and how personal factors such as religiosity can moderate the relationship between learning facilities and student learning outcomes. The results of this study can assist educational institutions in improving the quality of learning facilities and understanding the role of individual factors in the development of an effective learning environment.

5   Conclusion

Based on the results of the study, it can be concluded that learning facilities are important in achieving good learning outcomes in higher education, even in faith-based contexts. Adequate learning facilities can act as a key driver in improving students' academic performance. In addition, religiosity, although not having a significant direct impact, has an important role as a moderate factor that strengthens the influence of learning facilities on learning outcomes.

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