Factors influencing students' intention to enroll at private higher education institution

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Article Info

ABSTRACT

Intense competition exists amid the rapid growth of universities worldwide and in Indonesia. Often, private higher education is the victim of defeat from competition. Because competitive pressures such as these will undoubtedly lead to reduced revenues, universities are encouraged to increase their student numbers to increase revenues. According to the theory of planned behavior, the intention to carry out certain actions is an essential prerequisite for the strategy's success. This research examines the factors influencing students to enroll in private, Muhammadiyah contexts, higher education institutions. By involving 572 respondents and using partial least squares structural equation modeling (PLS-SEM) analysis, this research shows that among the factors that influence students' intention in enrolling in Muhammadiyah Higher Education Institutions are higher education institution image and student characteristics, where both have a positive and significant influence with values (β=0.409; p-value=0.000) and (β=0.461; p-value=0.001).

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1. INTRODUCTION

Higher education is an essential element in the education sector [1]. Higher education is currently considered more competitive, dynamic, and global [2]. Therefore, it is unsurprising that higher education has proliferated worldwide in recent decades. This growth is generally associated with increasing variety in higher education, where new sectors and institutions emerge to provide different study programs. Meanwhile, these developments are often related to political and economic factors that support market forces, which lead to increased privatization and competition in the higher education sector [3].

However, as higher education develops, new challenges emerge as a consequence. Where higher education institutions (HEI) or universities compete with each other [4], one of which is to attract potential (new) students [5], [6]. Like in Indonesia, the fast expansion of higher education institutions (HEI) in recent decades has led to fierce competition among these institutions [7], [8]. The exponential growth of higher education undeniably yields both favorable and unfavorable consequences. Positively, this has created prospects for students and employees to pursue further education. However, this has also posed difficulties in selecting higher education institutions and study programs, which are becoming progressively more challenging [9].

Not only that, competition in the higher education market in Indonesia is also increasingly challenging because there is competition between state and private universities. Often, private universities are

overwhelmed and experience defeat. Data shows that the number of private universities in Indonesia decreases yearly due to mergers, acquisitions, moving locations, or inactivity due to the inability to attract potential students [10]. This kind of competitive pressure will undoubtedly result in a decrease in revenue, so this has encouraged universities to increase the number of students to increase revenue, where students are considered "customers" [11], [12]. However, this task is not straightforward [13], [14], because there is relatively tight competition for student enrollment between higher education institutions [15].

The literature on services marketing conceptualizes services such as higher education as highly complex and highly differentiated. It is intangible, heterogeneous, inseparable, and easily damaged [16]. However, researchers from various disciplines have modeled students' decisions or intentions for college enrollment, including private colleges, over the past several decades [17]. According to the theory of planned behavior, the intention to carry out certain actions is a necessary prerequisite, especially in the context of a decision [18], which in this context is, of course, a prospective student's decision to enroll in a private higher education institution.

Several studies have emerged to increase our understanding of the factors influencing students' intention to choose higher education institutions [19]. However, existing previous research only focuses on research on loyalty [20], or even intention to learn [21], persist [22], drop out [23]–[25] or even stop enrolling in higher education [26]. So, the intention to enroll in higher education has not yet been widely researched. Apart from that, existing research also only focuses on Angola [27], Rwanda [28], Oman [29], Istanbul (Turkey) [30], [31], and United Kingdom (UK) [32]. Meanwhile, this research was conducted in Indonesia. Because we think a broader and more in-depth study in Indonesia is needed to understand more comprehensively how these factors play a role in the local context. With further research, more profound insights can be produced to support the development of higher education policies and practices in Indonesia. Based on the explanation, this research examines the factors influencing the students' intention (SI) to enroll in private Muhammadiyah higher education (PMHE). The two variables considered in this research are Higher Education Institution Image (HEII) and student characteristics (SC). The consideration for choosing a university's reputation is because there is a lot of consensuses regarding the benefits of a good higher education institution image [33], which is crucial in attracting students in a competitive higher education environment [34]. The same potential also applies to SC, but there has been no, or still little, further research related to it [35].

2.   METHOD

This research seeks to test the influence of HEII (H1) and SC (H2) on students' interest in studying at Muhammadiyah higher education. Based on this, this research uses a quantitative approach with a cross-sectional approach through survey methods as the primary approach to collect data. Data was obtained by distributing questionnaires to respondents online using Google Forms. Using the purposive sampling method, respondents who were willing to fill out the questionnaire consisted of 572 respondents who had the characteristics of not having gone to college and planning to study in social and humanities (SOSHUM) 60.66% and science and technology (SAINTEK) 39.34% in PMHE with the proportion of criteria female gender was 43.53% and male was 56.47%, 18.18% had a public high school educational background and 81.82% private. Most of them are from the family or members of the Muhammadiyah, 65.91% compared to 34.09% who are not.

The questionnaire distributed contained 17 statement indicators that had to be filled in by respondents. These indicators have previously been used in behavioral research by other researchers whose validity and reliability have been tested and proven [19]. The measurement scale uses a 5-point Likert scale, where number 1 reflects "strongly disagree," and number 5 reflects "strongly agree." After collecting the questionnaire, the data was processed and analyzed using the partial least squares (PLS)-structural equation modeling (SEM) analysis technique, which in several sources is considered the most widely and effectively used in social science research [36]–[41]. This is no exception in education [42]–[46].

3.   RESULTS AND DISCUSSION

As previously mentioned, this research uses PLS-SEM as the analysis method. In PLS-SEM analysis, measurements and evaluation criteria of the structural model and complementary analysis have become the basis for subsequent extension and application of the method [38]. The following is a further discussion.

3.1. Measurement model assessment

Assessment of measurement models is a development of classical test theory [47]. This is the first step in PLS-SEM analysis to test the reliability and validity of the measurements [48]. This is also the most essential thing to do before testing a theoretical model further [49].

There are at least four steps in the measurement model test; first, by looking at the loading, the minimum standard for the loading value is 0.708 [47], [50]. Based on these standards, the values of all indicators in this study meet the standards, so they can be said to be reliable because they are >0.708. Then, we look at the reliability of each construct. At this stage, what is seen is the value of α and CR. The rule of thumb for both reliability criteria is that they should be above 0.70 [47], [51]–[55]. Table 1 shows the overall construct values for both α and CR are >0.70, so it can be said that all constructs (variables) in this study are reliable.

Table 1. Measurement model assessment results

Variables	Loading	α	CR	AVE
HEII		0.938	0.948	0.644
HEII 1	0.794			
HEII 2	0.805			
HEII 3	0.740			
HEII 4	0.772			
HEII 5	0.831			
HEII 6	0.808			
HEII 7	0.846			
HEII 8	0.817			
HEII 9	0.833			
HEII 10	0.773			
SC		0.862	0.906	0.708
SC 1	0.867			
SC 2	0.827			
SC 3	0.834			
SC 4	0.836			
SI		0.777	0.869	0.689
SI 1	0.860			
SI 2	0.806			
SI 3	0.824			

Testing the validity of each concept is the next step that needs to be taken. In this evaluation, two aspects need to be examined and demonstrated: convergent validity and discriminant validity. Concerning convergent validity, the standard value is equal to or more than fifty percent (or ≥0.50) of the average variance extracted (AVE) [56], [57]. Because each of the constructs in this study has an average value that is more than 0.50, it is evident from the data presented in Table 1 that all of the constructs are valid. On the other hand, discriminant validity is achieved by comparing the variances that are shared within a construct. It is a situation in which the variance within a construct must be greater than the variance shared between other constructs [47], [54]. It is evident from the data presented in Table 2 that all of the constructs utilized in this investigation are also valid.

Table 2. Discriminant validity test results

	X1	X2	Y
X1	0.803		
X2	0.794	0.841	
Y	0.776	0.786	0.830

3.2. Structural model assessment

This model functions to describe the causal network of latent variables [58], which begins by analyzing the relationships between constructs [59]. R^2 is the most frequently used statistic to evaluate the predictive ability of structural models. The coefficient of determination is an expression used to describe this [47]. The minimum R^2 value is 0, and the maximum is 1 [47]. It is demonstrated that the R^2 value of this research is 0.680, which is equivalent to 68%. According to the standards by Hair *et al.* [60], this indicates that the magnitude of the influence of the variability of endogenous variables that exogenous variables may explain is considered to be large [60]. While the R2 test is the most significant part of the structural model evaluation, the F^2 test, which measures the effect size, is also critical. The F^2 value of the HEII is 0.194 and

SC is 0.246. Considering these numbers, one can conclude that the impact of HEII and EC on interest is still relatively minimal compared to the requirements [60].

3.3. Hypothesis assessment

This is the final assessment of the PLS-SEM analysis, namely testing the proposed hypothesis. Table 3 shows the results of hypothesis testing, which shows that the influence of HEII (β=0.409; p-value=0.000) and SC (β=0.461; p-value=0.000) on students' intention to enroll MHEI shows a significant relationship and influence. Positive with a significance value of p-value <0.05. then H1 and H2 are accepted.

Table 3. The summary of hypotheses results

Variable	β	T-value	P-value
HEII→SI	0.409	11.608	0.000
SC→SI	0.461	12.672	0.000

Empirically, this research may contradict the results of the research [19], but on the other hand, this research actually supports several results of other previous studies globally [29], [61]–[66]. HEII's positive results on students' intention to enroll at MHEI indicate that criteria such as HSEI's image or reputation are very important for prospective students [67]. Therefore, the higher the image or reputation of an MHEI that prospective MHEI students perceive, the more it will trigger students' interest in registering to study at MHEI. This also happens the other way around. These results certainly align with the theory that the most effective strategy for attracting student interest is to build an image or reputation [56]. Consequently, the findings of this study demonstrate the advantages of a HEI's favorable image in terms of validating the recruitment of students and constructing more effective networks [68].

Furthermore, this research proves that SC positively influences students' intention to enroll at MHEI. These results are in line with and support several previous international research results [19], [69], [70]. This research also confirms that according to TPB theory, individual intentions result from attitudes developed through experience and personal characteristics [71]. These results also eliminate doubts about whether personal (student) characteristics are worthy of study [72].

Based on the explanation, this study highlights the importance of image and SC for HEIs. Although this study focuses on Indonesia, the urgency of image for HEIs has also been highlighted by researchers in various countries, such as Russia [73], Italy [74], Spain [75]–[78], Qatar [1], [79], Pakistan [80], and Malaysia [81]. Likewise, its influence on student intention to register or enroll has also been studied by various researchers internationally from various countries [29], [66], [82] with various international students from Bangladesh, Nigeria, Yemen, and Pakistan [83]. This proves the significance of the image of the institution in addition to forming future enrollment [84]. A similar argument certainly applies to SC.

Lastly, this research has theoretical and practical implications. Theoretically, this research implies that what influences students' intention to enroll at Muhammadiyah Higher Education Institutions is the HEII side and students' characteristics. This certainly expands previous findings where interest in the HEI context is influenced by social influence and attitude toward performing behavior [11]. The practical implication of this research is that Muhammadiyah Higher Education Institutions must improve their reputation because this is one of the positive aspects that generates positive intentions to study at Muhammadiyah Higher Education Institutions. On the other hand, Muhammadiyah Higher Education Institutions must pay attention to and understand the characteristics of potential prospective students because this is also one thing that generates positive intentions to enroll at Muhammadiyah Higher Education Institutions not only nationally but also internationally. Moreover, recent studies have stated that student mobility on a global scale has extended beyond Europe, North America, and Australia to include Asian countries [85], This is absolutely very important for competing globally and getting potential international students.

4.   CONCLUSION

In the end, this research proves that among the factors influencing students' intention to enroll at Muhammadiyah Higher Education Institutions are higher education institutions' image and student characteristics. These findings support previous research findings globally, emphasizing the importance of building a positive image and institutional reputation as an effective strategy to attract students. Even though both have a positive and significant influence, the influence of student characteristics is greater than that of higher education institution image. This research certainly extends previous findings as theoretical implications. In terms of practical implications, this research requires Muhammadiyah Higher Education

Institutions to improve their good reputation. On the other hand, Muhammadiyah Higher Education Institutions must pay attention to and understand the characteristics of potential prospective students. These are because those two things can attract more national and international students and generate positive intentions to enroll and study at Muhammadiyah Higher Education Institutions.

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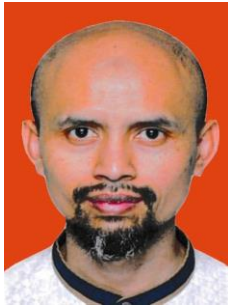
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