



A Comprehensive Analysis of Personal Interest, Self-Capacity, Career Opportunities, Culture, and Social Media on Students' Major Choice in Indonesia

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Abstract

Choosing a major is an important decision for students in Indonesia because it determines the direction of their education and career opportunities. However, previous studies still show inconsistencies regarding which factors are most influential and how aspects of career opportunities, culture, personal interest, self-capacity, and the influence of social media work together in a national context. This gap prompted this study to analyze the determining factors of students' major choice through a quantitative survey method of 216 students from various levels of education in Indonesia, with PLS-SEM used as the analysis technique. The results show that career opportunities, culture, and personal interest have a significant effect. These findings indicate that students' decisions are guided more by pragmatic considerations and cultural values than by personal aspects or digital information. This study concludes that students need access to more accurate career information and guidance services that can balance their interests, potential, and career prospects, and recommends further understanding of the dynamics of major selection.

Keywords: Personal Interest; Self-Capacity; Career Opportunities; Culture, Social Media; Students' Major Choice

Introduction

Major selection at the higher education level is a strategic decision that determines academic direction, career opportunities, and future quality of life. Changes in labor market needs and increasing professional competition have made this process increasingly complex in the Indonesian context (Wicaksono et al., 2023). Inappropriate decisions often result in competency mismatches, major changes, or academic failure. Social, cultural, and economic pressures that arise in students' lives have the potential to reduce their ability to make rational decisions (Fajriani et al., 2024; Tan, 2024; Thi et al., 2025). This indicates the need to understand the factors that shape students' preferences in choosing a major in greater depth.

Studies on students' major choice have developed in various educational contexts and provide an initial overview of students' decision-making patterns. Previous studies show that labor market

information, early experiences in a particular field, cognitive abilities, and cultural capital influence students' tendencies in choosing a major (Baker et al., 2018; Deldoost et al., 2019; Fricke et al., 2018; Hu & Wu, 2019). This understanding illustrates that students often combine various external sources of information when determining the major they wish to pursue. This consistent development in the literature reflects that the topic of major selection has become a strong and relevant multidisciplinary study.

More recent developments on this topic show the influence of increasingly rapid social dynamics on the major selection process. Interactions within the family, childhood experiences, mentoring, and perceptions of course difficulty have been shown to shape students' academic preferences significantly (Chen et al., 2023; Ersoy & Speer, 2025; Myers et al., 2022; Stoeger et al., 2023). The influence of initial academic grades and recommendations from the social environment also encourages students' final choices (Dyce et al., 2021; Yuan et al., 2025). This picture shows that the process of choosing a major is increasingly influenced by various interrelated social aspects, resulting in a broader understanding of the mechanisms of student decision-making.

International research has outlined various determining factors in major selection, but several gaps remain when applied to the Indonesian context. The social characteristics of the countries where previous studies were conducted differ significantly, so the patterns found need to be re-examined in the local context (Osikominu et al., 2019; Yuan et al., 2025). The limitations of studies that combine internal factors such as personal interests and self-capacity with external factors such as culture and social media in a single empirical model reveal an unfulfilled research gap. This condition indicates the need for research that is able to simultaneously combine various factors to understand the dynamics of major selection among Indonesian students more comprehensively.

Internal factors, consisting of personal interest, self-capacity, and career opportunities, play an important role in shaping student preferences. Research by Yuan et al. (2025) and Baker et al. (2018) shows that personal interest provides direction for academic choices that are considered in line with individual preferences. Belief in one's abilities or self-capacity is the basis that influences students' decisions in choosing a major that they consider they can master (Deldoost et al., 2019; Evans et al., 2020). Thoughts about career opportunities then reinforce students' rational considerations so that their choice of major is in line with future job prospects (Franklin et al., 2021; Sudhana et al., 2020). These three factors reflect how students assess the fit between themselves and the career goals they want to achieve.

External factors, including culture and social media, also have an increasing influence on students' academic decision-making. Culture, shaped by family, tradition, and social aspirations, creates values and norms that can encourage or limit students' choice of major (Denzler & Wolter, 2018; Hu & Wu, 2019). Access to information on social media provides an overview of professions, lifestyles, and career prospects, thereby shaping students' perceptions of the most suitable academic choices (Fricke et al., 2018; Stoeger et al., 2023). These two external factors explain how social and technological developments influence students' thinking in determining their majors.

This study provides empirical contributions through a comprehensive analysis of the five main variables described above. The purpose of this study is to identify the influence of personal interests, self-capacity, career opportunities, culture, and social media on students' decisions in choosing a major. The integration of internal and external factors in a single model provides a more complete picture of the mechanisms of student academic decision-making. This study differs significantly from previous studies because it tests all five variables simultaneously in the Indonesian context, which has not been widely studied in previous literature.

Theoretical Framework

Students' Major Choice

A significant choice is an important decision for students because it determines the direction of their studies and career opportunities. Researchers use different terms to describe this concept, but the meaning remains the same. Piepenburg and Fervers (2022) describe a major choice as the field of study that students want to pursue in college. Dunlap and Barth (2019) view it as a decision to pursue a particular academic field, which they categorize as STEM or female-dominated fields. Denzler and Wolter (2018) emphasize the decision-making process regarding the field of study chosen at the university level. Pritchard et al. (2010) see major selection as an academic specialization influenced by various factors. These researchers' explanations show that major selection is understood as a student's decision regarding the field of study that is considered most suitable for their interests, abilities, and goals.

The similarity in these views shows that there is no significant difference in meaning regarding the variable of major choice. Each definition only differs in emphasis, such as student intentions, decision-making processes, or categorization of fields of study. No researcher presents a specific dimension for this variable, so the major choice is generally treated as a final decision influenced by other external and internal factors. The absence of this dimension suggests that major choice is considered a whole concept that does not need to be broken down into smaller components in their research.

This study uses this understanding as a basis for examining students' major choices in Indonesia. Relevant variables such as personal interests, financial resources, self-capacity, career opportunities, culture, influencers, and social media (Piepenburg & Fervers, 2022; Dunlap & Barth, 2019; Denzler & Wolter, 2018; Pritchard et al., 2010) illustrate that the decision to choose a major does not stand alone. Students consider what they like, their abilities, their family's economic conditions, job opportunities, cultural values, the influence of family or friends who act as influencers, and the information they receive through social media. These factors are in line with Pritchard et al.'s (2010) view of the diverse influences on academic decisions. This study seeks to clarify how all these factors work in the Indonesian context to provide a deeper understanding of the process by which students determine their majors in higher education.

Research Hypothesis

The hypothesis regarding the role of interest in choosing a major was developed by looking at how previous studies showed similar patterns, even though they were conducted at different levels of education. Research by Yuan et al. (2025) describes that high school students in China tend to choose majors that match their interests because this stage is the beginning of determining their direction of study. A study by Baker et al. (2018) shows that Community College students in the United States still prioritize personal interests when choosing majors, even though they already have more complete information about job opportunities. Quadlin's (2020) analysis of post-secondary education in the United States also shows that interests remain a major factor even though the academic environment is more complex. These three contexts can be understood as different journeys, but they lead to a similar conclusion that interests are always the main driving force when someone decides what field to study. The consistency of these findings forms the basis for the conclusion that interests influence major selection, thus providing a strong foundation for the formulation of this research hypothesis (Yuan et al., 2025; Baker et al., 2018; Quadlin, 2020).

H₁: Interest influences Student Major Choice

Self-efficacy describes students' confidence in their ability to follow lectures, so it is reasonable that this variable influences major selection. Previous studies have shown similar patterns in various contexts. Findings by Deldoot et al. (2019) in Iran show that students tend to choose majors that they feel match their academic abilities. Evans et al. (2020) in the United States also found that community

college students use self-efficacy assessments as a basis for choosing a major in the early stages of higher education. Dyce et al. (2020) in Canada showed that business students are more confident in choosing a particular field when they feel capable of meeting the demands of college. Myers et al. (2022) provide additional evidence that self-efficacy continues to play a role for undergraduate business students in various types of colleges. Ersoy and Speer (2025) show that perceptions of course difficulty are related to students' beliefs about their self-efficacy, thereby influencing their major selection decisions. The consistency of these findings shows that students tend to choose majors that they consider to be in line with their perceived abilities, leading this study to propose the hypothesis that self-efficacy has a significant effect on major selection (Deldoost et al., 2019; Evans et al., 2020; Dyce et al., 2020; Myers et al., 2022; Ersoy & Speer, 2025).

H₂: Self-Capacity Influences Student Major Choice

Career opportunities are often a basis for students' consideration in choosing a major, making this variable relevant to test in the context of higher education. Research by Yuan et al. (2025) shows that high school students in China have considered job prospects from the outset, a pattern that is essentially similar to the process experienced by students when deciding on a major at university. The findings of Baker et al. (2018) on community college students in the United States show that labor market information encourages students to choose fields that are considered to have greater opportunities after graduation. A similar pattern is also seen in art and design students in Indonesia in the study by Sudhana et al. (2020), where career opportunities remain an essential factor even though personal interests are quite dominant. Franklin et al. (2021) reinforced this evidence through research on senior business students who placed job prospects as a significant consideration before deciding on a field of study. Ersoy and Speer (2025) then confirmed that new students also assess from the outset how their choice of major will open up specific job opportunities in the future. The consistency of these findings shows that career opportunities are a rational consideration for students in determining their major, so this research hypothesis states that career opportunities have a significant effect on major selection (Sudhana et al., 2020; Yuan et al., 2025; Baker et al., 2018; Franklin et al., 2021; Ersoy & Speer, 2025).

H₃: Career Opportunities Influence Student Major Choice

Culture shapes how students view their major choices, so the hypothesis that culture influences these decisions has a strong basis in previous studies. Hu and Wu (2019) showed that full-time undergraduate students in China are greatly influenced by the values, expectations, and social customs that prevail in their environment, so their major preferences follow established cultural patterns. Denzler and Wolter (2018) found that high school graduates in Switzerland still consider cultural norms even though the education system gives them the freedom to choose a major, indicating that the social environment remains an important reference. Osikominu et al. (2020) provide additional support through a study at the university level, showing that sociocultural factors influence how students assess the fit between their self-identity, aspirations, and the majors they will take. This collection of findings confirms that culture acts as a framework that shapes students' academic preferences, so that their choice of major is not only driven by personal interest, but also by the values and expectations they learn from their immediate social environment.

H₄: Culture Influences Student Major Choice

The influence of social media on students' major choices is evident in various studies, giving this hypothesis a strong foundation. Chen et al. (2023) found that media reports during the SARS outbreak influenced the career aspirations of children in China, shaping their educational paths from an early age. Fricke et al. (2018) showed that first-year students in Switzerland brought their experiences from social media to the campus environment, and these experiences influenced how they assessed their current majors. Stoeger et al. (2023) revealed that high school girls in Germany who participated in the CyberMentor program felt the impact of digital platforms on their career and educational choices because they received a lot of information and stories from online mentors. These results (Chen et al., 2023; Fricke et al., 2018; Stoeger et al., 2023) illustrate that social media can shape how students think about

their academic future, so that their choice of major can be influenced by the content they see, understand, and believe.

H₅: Social Media Influence Affects Student Major Choice

Research Methods

Study Design

This study adopts a quantitative approach using a survey method to collect data from students in Indonesia. The survey design was chosen for its ability to collect information from a large number of respondents regarding their perceptions, attitudes, and preferences (Creswell & Creswell, 2018). This approach is particularly suitable for examining the factors that influence students' choice of major because it can measure the relationship between variables systematically and produce consistent findings (Field, 2018). Primary data were collected through a structured questionnaire distributed to 222 students from various educational backgrounds and types of universities, both public and private, in Indonesia. However, there were six invalid samples, so only 216 samples were used. The questionnaire was designed to measure independent variables (Hair et al., 2017) such as personal interest, self-capacity, career opportunities, culture, and social media, as well as the dependent variable, namely student major choice. The sample selection was conducted non-probabilistically using purposive sampling, in which respondents were selected based on specific criteria relevant to the research objectives (Sekaran & Bougie, 2016), namely students who were pursuing higher education at the diploma/bachelor's, master's, or doctoral level. The data collection process ensured that the information obtained still represented the target population, despite limitations in generalization due to the use of non-probability sampling techniques (Malhotra et al., 2017). Data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM), an effective method for analyzing complex structural models and suitable for research with latent variables (Sarstedt et al., 2020). This research design allows for the identification and evaluation of causal relationships between the variables studied (Gefen et al., 2000), thereby providing a comprehensive understanding of the phenomenon of student major selection in Indonesia.

Data Analysis Technique

This study adopted a quantitative approach using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method to test the causal relationships between variables (Hair et al., 2017). The data analysis process was carried out sequentially and systematically, beginning with an internal consistency reliability test using Cronbach's Alpha coefficient to ensure the consistency of the instrument measurements (Trizano-Hermosilla & Alvarado, 2016). Next, convergent validity was assessed through outer loading and Average Variance Extracted (AVE) values, ensuring that each indicator accurately measured the intended construct (Hair, 2021). Discriminant validity was tested using the Heterotrait-Monotrait (HTMT) ratio to ensure that the constructs did not overlap with each other because this method was considered more accurate than the Fornell-Larcker criteria (Henseler et al., 2015). Common Method Bias (CMB) testing was conducted using the Full Collinearity Variance Inflation Factors (FCVIFs) method to ensure data independence from bias caused by a single data collection method (Kock, 2015). After all measurement criteria were met, the structural model was analyzed to test the hypothesis through the interpretation of path coefficients and t-statistic values to determine the significance of the relationship between variables (Sarstedt et al., 2019). The explanatory power of the model was also assessed through the R-squared (R²) and Adjusted R² values on the dependent variable (Chin, 2010), thus providing an overview of the extent to which the independent variables were able to explain the variance in student major choice.

Hypothesis Testing

To test the research hypothesis regarding the influence of the variables of Interest, Self-Capacity, Career Opportunity, Culture, and Social Media on Student Major Choice in Indonesia, this study used the Partial Least Squares Structural Equation Modeling (PLS-SEM) method, a statistical approach used to analyze complex relationships between variables (Hair et al., 2017). The testing process began with evaluating the measurement model through convergent validity, discriminant validity, and reliability to ensure data quality and the accuracy of the instruments used (Hair et al., 2019). After the measurement model was verified, testing continued with structural model analysis, where path coefficient values and t-statistic values were used to determine the direction and significance of the relationship between independent and dependent variables (Chin, 1998). The research hypothesis is considered significant if the t-statistic value reaches a threshold of 1.96 at a significance level of 5% (Gefen et al., 2000), thus indicating that the influence of independent variables on students' choice of major does not occur by chance (Sholihin & Ratmono, 2013). In addition, the R-squared (R^2) and Adjusted R-squared values of the dependent variable were also analyzed to evaluate the explanatory power of the model as a whole (Chin, 2010), thus ensuring that the proposed model had an adequate level of explanation for the variance that occurred in Student Major Choice.

Result

Respondent Profile

The research was conducted using an online survey distributed to the target respondents. Data screening was conducted to detect problematic respondents, because according to Hair (2019), this detection process is necessary to avoid response bias, such as respondents who fill out the questionnaire carelessly or show specific, unusual filling patterns. From the distribution of the questionnaire, there were 216 respondents who completed the questionnaire and met the research criteria. The respondent profile data can be seen in Table 1.

Table 1. Respondent Profile

Profile	Classification	No	%
Gender	Male	29	13.43
Gender	Female	187	86.57
Education	Bachelor's Degree/Diploma	197	91.2
Education	Master	18	8.33
Education	Doctorate	1	0.46
University Classification	Public	155	71.76
University Classification	Private	61	28.24

This study involved 216 student respondents from various backgrounds, providing a comprehensive picture of the study participants' profiles. The majority of respondents were women, namely 187 people (86.57%) of the total participants, while male respondents numbered 29 people (13.43%). In terms of education level, 197 respondents (91.20%) were pursuing a bachelor's or diploma degree. Furthermore, 18 respondents (8.33%) were at the master's level, and only one respondent (0.46%) was pursuing a doctoral degree. Based on university classification, 155 respondents (71.76%) came from public universities, reflecting the dominance of students from the public education sector, while 61 respondents (28.24%) came from private universities. The diverse profile of the respondents enriched the quality of the research data, providing a good representation of the student population in Indonesia.

Reliability Test

The reliability test results can be seen in Table 2.

Table 2. Internal Consistency Reliability Testing

Variable	Cronbach Alpha	Description
Career Opportunities	0.8174	Very Good
Culture	0.5581	Good
Interest	0.7573	Very Good
Self-Capacity	0.8062	Very Good
Social Media Influence	0.7935	Very Good
Student Major Choice	0.6601	Good

His study carefully tested the internal reliability of the measurement instrument using Cronbach's Alpha coefficient (Trizano-Hermosilla & Alvarado, 2016). The Cronbach's Alpha value serves as an indicator of the internal consistency of the variables studied. The "Career Opportunities" variable showed excellent reliability with a value of 0.8174, as did the "Interest" variable with a value of 0.7573, "Self-Capacity" with a value of 0.8062, and "Social Media Influence" with a value of 0.7935. all of which exceed the minimum threshold of 0.70 recommended for exploratory research (Diamantopoulos et al., 2012). Meanwhile, the variables "Culture" with a value of 0.5581 and "Student Major Choice" with a value of 0.6601 show reliability that can still be categorized as good. Although the reliability value for the "Culture" variable is slightly below the general threshold of 0.60 for exploratory research, this value is still within the tolerance limit for preliminary studies (Trizano-Hermosilla & Alvarado, 2016). These test results indicate that most of the instruments have a high level of reliability in measuring the intended construct (Diamantopoulos et al., 2012). The use of flexible thresholds also helps accommodate the exploratory nature of several aspects of this study (Trizano-Hermosilla & Alvarado, 2016). Therefore, these findings provide a strong basis that the measurement instruments are internally consistent and the data obtained are reliable (Diamantopoulos et al., 2012).

Convergent Validity Result

The results of the Convergent Validity test can be seen in Table 3.

Table 3. Convergent Validity Testing

Variable	Indicator	Factor Loading	Composite Reliability	AVE
Career Opportunities	CarOpp1	0.7359	0.8724	0.5784
	CarOpp2	0.7843		
	CarOpp5	0.6874		
	CarOpp6	0.7739		
	CarOpp7	0.8149		
Culture	Cul3	0.7421	0.7700	0.5275
	Cul6	0.7177		
	Cul7	0.7188		
Interest	Int1	0.7888	0.8465	0.5807
	Int2	0.7558		
	Int3	0.8144		
	Int4	0.6827		
Self Capacity	SelCap1	0.7985	0.8660	0.5648
	SelCap2	0.8211		
	SelCap3	0.6980		
	CellCap4	0.7166		
	CellCapacity5	0.7152		

Variable	Indicator	Factor Loading	Composite Reliability	AVE
Social Media Influence	SocMed1	0.7977	0.8662	0.6186
	SocMed2	0.7973		
	SocMed3	0.8267		
	SocMed4	0.7205		
Student Major Choice	StuMaj1	0.8159	0.8036	0.5804
	StuMaj2	0.8240		
	StuMaj3	0.6297		

Convergent validity testing was conducted to ensure that the research instrument was able to accurately measure the construct that was supposed to be measured (Hair et al., 2019). In studies examining various factors determining students' choice of major in Indonesia, convergent validity testing was carefully conducted using two main criteria, namely indicator reliability (outer loading) and Average Variance Extracted (AVE) (Hair, 2021). Each indicator was analyzed individually to see the extent to which it correlated positively with its latent construct. Based on Hair's (2021) guidelines, an excellent outer loading value is above 0.7.

From the test results presented, it can be seen that all indicators used in this study meet the excellent outer loading standard, which is above 0.7, except for one indicator in the Student Major Choice variable. In the Career Opportunities variable, all indicators (CarOpp1, CarOpp2, CarOpp5, CarOpp6, CarOpp7) consistently show outer loading values above 0.7, ranging from 0.6874 to 0.8149. These values indicate that these indicators have high reliability in measuring the "Career Opportunities" construct (Hair, 2019). The Culture variable also shows good convergent validity with indicators Cul3, Cul6, and Cul7 having outer loadings above 0.7. The Interest variable shows strong performance with indicators Int1, Int2, Int3, and Int4 having outer loadings above 0.68 and most exceeding the 0.7 standard, indicating that the interest aspect is well measured.

Furthermore, the Self Capacity variable shows significant strength, where all of its indicators (SelCap1, SelCap2, SelCap3, SelCap4, SelCap5) have excellent outer loading values ranging from 0.6980 to 0.8211 (Hair et al., 2019). These values confirm that the indicators used are a valid representation of students' self-capacity. The Social Media Influence variable also shows positive results, with indicators SocMed1, SocMed2, SocMed3, and SocMed4 all having outer loading values above 0.7 (Hair, 2021). However, in the Student Major Choice variable, although the StuMaj1 and StuMaj2 indicators showed extreme outer loading values of 0.8159 and 0.8240, respectively, the StuMaj3 indicator had an outer loading value of 0.6297. Based on Hair's (2019) criteria, indicators with scores between 0.4 and 0.7 "should be removed if they increase the composite reliability value." Therefore, researchers need to consider the possibility of removing the StuMaj3 indicator after evaluating its impact on the overall composite reliability of the Student Major Choice variable. Overall, most of the indicators in this study have met strict convergent validity criteria.

Discriminant Validity Result

The complete results of the Discriminant Validity test can be seen in Table 4.

Table 4. Discriminant Validity Test

Variable	1	2	3	4	5	6
Career Opportunities	0.7606					
Culture	0.3954	0.7263				
Interest	0.3438	0.4056	0.7620			
Self Capacity	0.4852	0.4591	0.5679	0.7515		
Social Media Influence	0.2668	0.3093	0.3330	0.2962	0.7865	
Student Major Choice	0.5708	0.5492	0.4075	0.4377	0.2037	0.7618

Discriminant validity was used to investigate the factors determining students' choice of major in Indonesia, such as Interest, Self-Capacity, Career Opportunity, Culture, and Social Media. This validity ensures that each construct measured is genuinely different from other constructs in the model (Sarstedt et al., 2019). Without strong discriminant validity, there is a risk that these constructs will overlap, which can cause bias in the analysis results and lead to misinterpretation (Hair et al., 2017).

The Fornell-Larcker criteria (Fornell & Larcker, 1981) have long been the primary reference in testing discriminant validity. According to these criteria, the square root of the Average Variance Extracted (AVE) of a construct must be higher than its highest correlation with other constructs in the model (Hair et al., 2017). Although widely used, recent studies have shown that these criteria are less accurate in detecting violations of discriminant validity (Henseler et al., 2015; Radomir & Moisescu, 2019). These limitations have encouraged the development of more modern and reliable approaches, providing researchers with stronger alternatives to ensure that each construct is accurately measured and does not overlap with others (Sarstedt et al., 2019).

One important step to ensure measurement quality in the model is to examine the outer loading value of each indicator (Kline, 2016). Indicators with outer loadings below 0.40 need to be eliminated because they are considered incapable of adequately representing the latent construct (Hair et al., 2017). Low loading values indicate that the indicator does not contribute optimally to the measured construct, thereby potentially reducing the construct validity and discriminant validity of the model (Wong, 2013). By removing weak indicators, researchers can strengthen conceptual clarity and improve the predictive power of the model (Kline, 2016). This process is crucial to ensure that each construct has a clear and distinct identity, so that the results of the analysis of the factors influencing Student Major Choice in Indonesia can be explained more accurately.

R-Square Result

The complete R-Square test results can be seen in Table 5.

Table 5. R-Square Test Results

Dependent	R-Square	Adjusted R-Square	Status*
Student Major Choice	0.4681	0.4554	Moderate

This study examines the influence of various factors on student major choice in Indonesia, including personal interest, self-capacity, career opportunities, culture, and social media. The results of the PLS-SEM analysis show that the R-squared (R^2) value for the dependent variable of student major choice is 0.4681, with an Adjusted R^2 of 0.4554. Referring to Hair et al. (2017), the R^2 value indicates that 46.81% of the variance in major choice can be explained by the combination of independent variables in the model. Thus, the developed model has a relatively strong explanatory power regarding the phenomenon of student major choice.

The Adjusted R^2 value of 0.4554 provides a more accurate estimate of the model's predictive ability because it considers the number of predictors used (Chin, 1998). Based on Chin's (2010) classification, the Adjusted R^2 value is in the "moderate" category. This finding indicates that the independent variables tested make a significant contribution, but do not fully explain all the variation in major choices. Thus, there may be other factors outside the model that influence students' decisions in determining their field of study.

Therefore, although this model can explain almost half (45.54%) of the variation in students' major choices, researchers still need to consider identifying and integrating other relevant variables in future studies to increase the explanatory power of the model and approach a more substantial level of explanation (Fornell & Larcker, 1981; Sholihin & Ratmono, 2013). These findings provide an important contribution to understanding the factors that influence students' educational decisions in Indonesia (Hair et al., 2014; Gefen et al., 2000). Furthermore, this moderate level of explanation indicates room for

further research that could explore additional predictors that could potentially enrich the model and improve its predictive accuracy (Chin, 1998; Henseler et al., 2015).

Common Methods Bias Testing

This study tested Common Methods Bias (CMB) to ensure the validity of the findings. The CMB test used the Full Collinearity Variance Inflation Factors (FCVIFs) method to detect potential bias caused by the use of a single data source (Podsakoff et al., 2003). The test results show that the FCVIF value is 1.88, well below the threshold of 3.3 as recommended by Kock (2015). This value indicates that there is no CMB problem in the research data, so the findings can be considered reliable and free from the influence of standard method variance (Hair et al., 2017).

The absence of CMB provides more substantial confidence that the empirical relationship between the independent and dependent variables reflects actual conditions, rather than being an artifact of the measurement method (Malhotra et al., 2017). A low FCVIF value indicates that the variance in the data is not dominated by the data collection method, but by the substantive constructs being studied (Kline, 2016). Thus, the PLS-SEM analysis results can be interpreted as an accurate representation of the influence of Personal Interest, Self-Capacity, Career Opportunities, Culture, and Social Media on Student Major Choice without distortion from common method bias.

Hypothesis Testing

This study used SEMinR to test the structural model in order to evaluate the relationships between the constructs proposed in the research model. A bootstrapping procedure with 1,000 iterations was applied to estimate the significance of path coefficients and test the strength of the relationships between latent variables. This approach is commonly used in PLS-SEM analysis because it provides accurate estimates and does not require the assumption of normal distribution (Hair et al., 2017).

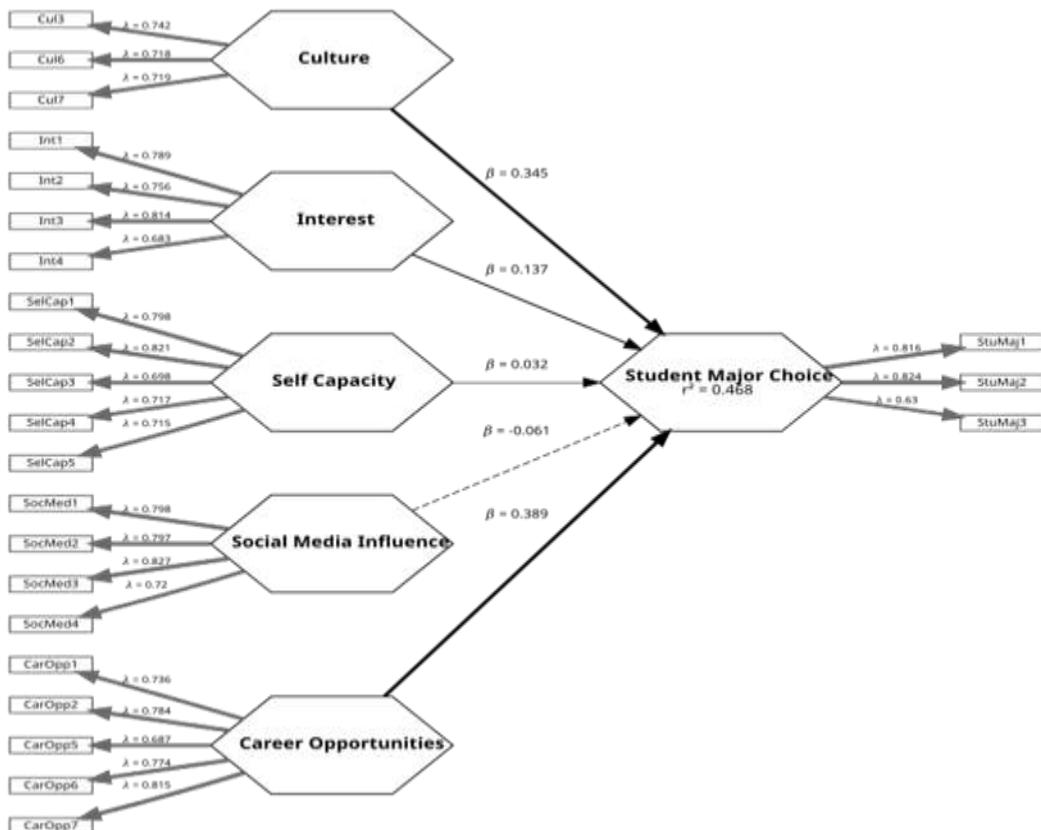


Figure 1. Hypothesis Testing

The results of the PLS-SEM analysis through the bootstrapping process presented path coefficient values, t-statistics, and p-values, which were then used to determine whether the relationships between constructs in the model were statistically significant. The complete findings regarding the influence of each independent variable on students' choice of major can be seen in the following hypothesis testing results table.

Table 6. Hypothesis Testing Results

Hypothesis	Original Sample	Standard Deviation	T-Test	Status
Career Opportunities → Student Major Choice	0.3886	0.0924	4.2043	Significant
Culture → Student Major Choice	0.3446	0.0800	4.3080	Significant
Interest → Student Major Choice	0.1367	0.0684	1.9994	Significant
Self-Capacity → Student Major Choice	0.0316	0.0792	0.3983	Not Significant
Social Media Influence → Student Major Choice	-0.0614	0.0600	-1.0245	Not Significant

The analysis conducted in this study comprehensively examines various factors that potentially influence student major choice in Indonesia, including Interest, Self-Capacity, Career Opportunities, Culture, and Social Media Influence. Hypothesis testing using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach provides a more in-depth picture of the strength and direction of the relationships between these variables. The results of the analysis show that each construct has a varying influence on Student Major Choice. Significance evaluation was performed using a 5% error rate threshold ($\alpha = 0.05$) or a t-statistic value ≥ 1.96 , in accordance with the standards in PLS-SEM-based research (Hair et al., 2017). These findings enable researchers to identify which factors are proven to be significant and relevant in explaining students' decisions in choosing a major.

More specifically, the analysis results show that Career Opportunities have a positive and significant effect on Student Major Choice. The path coefficient value of 0.3886 with a t-statistic of 4.2043 far exceeds the threshold of 1.96. This indicates that the higher students' perceptions of the career prospects of a field, the more likely they are to choose that major. This finding is in line with the literature, which confirms that job prospects are an important determinant in educational decisions (Yuan et al., 2025; Baker et al., 2018; Ersoy & Speer, 2025; Sudhana et al., 2020; Franklin et al., 2021). Many students tend to choose study programs that are considered to provide clear, stable, and promising career paths for the future.

The Culture variable also shows a positive and significant influence on Student Major Choice. With a path coefficient of 0.3446 and a t-statistic of 4.3080, these results indicate that cultural values, family expectations, and social norms substantially influence students' academic preferences. These findings are consistent with previous studies that emphasize the strong influence of sociocultural factors in shaping educational aspirations (Denzler & Wolter, 2018; Osikominu et al., 2020; Hu & Wu, 2019). In many cases, students consider society's views on "good majors" or "appropriate academic choices," so their decisions are not purely individual.

Meanwhile, the influence of Interest on Student Major Choice is positive but at the threshold of significance. The path coefficient of 0.1367 with a t-statistic of 1.9994 slightly exceeds the threshold of 1.96. This indicates that although personal interest plays a role in students' decisions, its influence is not as strong as Career Opportunities or Culture. These findings indicate that students' final decisions are often influenced by more dominant external factors (Yuan et al., 2025; Baker et al., 2018; Quadlin, 2020).

On the other hand, the variables Self-Capacity and Social Media Influence did not show a significant effect on Student Major Choice. Self-Capacity had a path coefficient of 0.0316 with a t-statistic of 0.3983, well below the significance threshold. These results indicate that students' perceptions of their abilities or talents are not a significant determinant in their choice of major (Ersoy & Speer, 2025; Dyce et al., 2020; Evans et al., 2020; Myers et al., 2022; Deldoost et al., 2019).

Similarly, Social Media Influence shows a negative path coefficient (-0.0614) with a t-statistic of -1.0245, which is also not significant. These findings indicate that although social media is an important part of students' lives, its influence on strategic decisions such as major selection appears to be indirect or insufficiently strong. In fact, the negative direction of influence opens up the possibility that information on social media does not always provide a positive boost in academic decisions (Chen et al., 2023; Fricke et al., 2018; Stoeger et al., 2023).

Overall, this study confirms that pragmatic and sociocultural factors, particularly Career Opportunities, Culture, and Interest, have the most dominant influence in shaping students' choice of major in Indonesia, compared to Self-Capacity and Social Media Influence.

Result Discussion

The discussion of the research results shows that the choice of majors by students in Indonesia is a process influenced by a combination of pragmatic, social, and personal factors. This decision-making mechanism not only reflects individual tendencies but also responses to broader social dynamics, as reflected in various previous studies (Wicaksono et al., 2023; Fajriani et al., 2024; Tan, 2024; Thi et al., 2025). The integration of empirical results and literature provides a more complete picture of how students assess their major choices in the Indonesian context.

Career opportunities emerged as the most dominant factor in students' decisions. This finding confirms that students tend to prioritize job prospects, income stability, and the relevance of majors to labor market needs. This pattern is consistent with previous studies emphasizing that students, both at the secondary and tertiary levels, actively consider career prospects when choosing a field of study (Yuan et al., 2025; Baker et al., 2018; Sudhana et al., 2020; Franklin et al., 2021; Ersoy & Speer, 2025). This decision indicates that students view education as a strategic investment that should provide long-term benefits.

In addition to career opportunities, cultural factors also have a strong influence on the choice of major. The results of the study show that family expectations, social pressure, and normative values attached to specific fields of study shape the way students assess academic choices. These findings are in line with the literature showing that social norms and cultural values can serve as a frame of reference that guides students' academic preferences (Denzler & Wolter, 2018; Hu & Wu, 2019; Osikominu et al., 2020). This attachment to social structures shows that major selection is not a free individual decision, but rather a social decision that considers the environment's perception of the appropriate educational choice.

The variable of personal interest has been shown to influence major selection, although not as strongly as career opportunities and culture. This pattern reflects that interest remains an important element in determining students' initial preferences, but its position is often secondary when faced with external pressures or future opportunities. These findings are in line with the results of studies by Yuan et al. (2025), Baker et al. (2018), and Quadlin (2020), which show that personal interest consistently forms the basis for decision-making, but its strength can change according to the social and economic context.

In contrast to these factors, the variable of self-capacity did not show a significant influence in this study. This finding indicates that students do not always base their academic decisions on a realistic assessment of their abilities or readiness. This pattern may occur because knowledge about one's abilities is not always in line with family expectations or public perceptions of specific majors. This condition differs from the findings of several international studies that place self-capacity as one of the determinants of major choice (Deldoost et al., 2019; Evans et al., 2020; Dyce et al., 2020; Myers et al., 2022; Ersoy & Speer, 2025), indicating cultural and social differences between Indonesia and other countries.

The subsequent finding shows that the influence of social media does not play a significant role in students' major selection. These results indicate that even though social media is an intense information space in students' lives, strategic decisions such as major selection are more influenced by sources of information that are considered more credible and socially close. This finding differs from several studies that found the influence of social media on career aspirations or educational choices (Chen et al., 2023; Fricke et al., 2018; Stoeger et al., 2023), indicating that in the Indonesian context, digital information is not entirely used as the primary reference in long-term educational decisions.

Overall, the results of this study confirm that the choice of major for students in Indonesia is greatly influenced by pragmatic considerations and socio-cultural frameworks, while personal and digital factors play only a secondary or even insignificant role. These findings are consistent with both global and local literature that major selection is a complex process involving the interaction of interests, social values, and rational calculations about the future (Piepenburg & Fervers, 2022; Dunlap & Barth, 2019; Pritchard et al., 2010). The Indonesian context shows that these decisions are guided more by career needs and family value structures than by independent individual reflection.

Conclusion & Recommendation

Conclusion

This study concludes that students' major choice in Indonesia is primarily determined by three factors that have been proven to be significant, namely career opportunities, culture, and personal interests. These three factors form the core of the decision-making process for students in choosing a major. Career opportunities are the most prominent factor, confirming that students consider job prospects, future stability, and opportunities for economic mobility when determining their academic choices, in line with previous findings regarding the dominance of labor market considerations in educational decisions (Yuan et al., 2025; Baker et al., 2018; Sudhana et al., 2020; Franklin et al., 2021; Ersoy & Speer, 2025). Culture also plays a significant role through family values, social norms, and expectations that steer students toward specific majors, as outlined in the literature on the influence of social context in academic decisions (Hu & Wu, 2019; Denzler & Wolter, 2018; Osikominu et al., 2020). Personal interest still contributes, albeit to a lesser extent, which is consistent with research that places interest as an important but not consistently dominant factor in major selection (Yuan et al., 2025; Baker et al., 2018; Quadlin, 2020).

Other findings indicate that self-efficacy and social media influence do not have a significant impact. The lack of influence of self-capacity indicates that students do not entirely rely on their perception of academic ability when determining their major, in contrast to several international findings that emphasize the role of self-efficacy in educational decisions (Deldooost et al., 2019; Evans et al., 2020; Dyce et al., 2020; Myers et al., 2022). The influence of social media also did not emerge as a strong determinant, despite digital platforms being deeply embedded in students' lives. This condition shows that strategic decisions such as major selection are still more guided by sources of information that are considered credible and socially close, in contrast to studies that find a significant role for digital media in career aspirations in specific contexts (Chen et al., 2023; Fricke et al., 2018; Stoeger et al., 2023).

Overall, this study confirms that Indonesian students' choice of major is the result of a complex interaction between pragmatic considerations and social pressure, with external factors dominating over personal and digital factors. This pattern shows that academic decisions cannot be separated from the social and economic dynamics that shape students' orientation towards the future (Pritchard et al., 2010; Piepenburg & Fervers, 2022; Dunlap & Barth, 2019). These findings not only fill a knowledge gap in the literature but also provide important insights for education policymakers, educational institutions, and career counselors to understand how students interpret the major selection process and what factors are most decisive in that process.

Recommendation

The finding that career opportunities and culture are the main determinants of major selection requires the education system to prepare more strategic interventions. Policymakers and schools need to provide structured, accessible, and data-driven career information so that students make decisions based on more than just social pressure or general perceptions. Information about industry developments, future competency requirements, and the relationship between majors and job opportunities should be provided early on. These efforts ensure that students' choices are not merely following cultural trends, but are based on a realistic understanding of career prospects.

Schools and career counselors need to strengthen guidance services with an approach that combines personal interests, individual potential, and available career opportunities. Counselors need to guide students in reading job opportunity maps, understanding professional developments, and recognizing how cultural values can influence their decisions. A more focused dialogue space on cultural influences needs to be facilitated so that students are able to respond to social pressure proportionally without neglecting their aspirations and personal strengths. This approach ensures that major selection decisions truly reflect a balance between student aspirations and the demands of the world of work.

Students need to be guided to be more proactive and critical in the major selection process. They are advised to seek information independently, objectively assess their suitability, and not rely on social media content, which has been proven to have no significant influence in this study. Students need to weigh their personal interests against the reality of career opportunities so that their educational decisions can support their sustainable professional future. For future researchers, the insignificance of self-capacity and the influence of social media indicate that there are other psychological and social factors that need to be explored to understand the dynamics of major selection more comprehensively.

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