

# How to Shape Students' Character Traits? Teacher Credibility Matters

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**Abstract.** This study aimed to analyze how the impact of teacher credibility on the character traits of students. We utilized Partial Least Square (PLS-SEM) with Hierarchical Component Models analysis on 186 respondents gathered from an online survey questionnaire completed by undergraduate students. The result of this study suggests that teacher credibility (competence, goodwill, and trustworthiness) positively and significantly impacts students' character traits (self-control/discipline, responsibility, integrity/fairness, cooperation, and compassion/empathy). In practice, this study suggests that in fostering good character traits, a teacher who teaches in a class should demonstrate good credit because it matters in shaping students' character traits, no exception in higher education.

Keywords: character traits  $\cdot$  higher education  $\cdot$  teacher credibility  $\cdot$  HCM PLS-SEM

## 1 Introduction

Moral and character crises have occurred both at the individual and collective levels, which are reflected in educational institutions from the macro level to the education unit [1]. This situation is further exacerbated by the Covid 19 pandemic, which has not ended for almost two years. Things are becoming the new norm nowadays. People are required to wear masks when in public spaces, places that are usually used as gathering places are limited in capacity and operating hours, and the most impactful so far: teaching and learning activities in schools and campuses have not been permitted with face-to-face activities and have been replaced with face-to-face activities learning to teach online through certain learning management system (LMS) applications.

Online learning has advantages and disadvantages. With the disappearance of physical interaction between students and lecturers as well as fellow students that usually occurs when they carry out face-to-face learning, learning certainly cannot be as conducive as face-to-face learning, especially those related to student character building. This is in line with the results of Suriadi's research [2] which states that online learning has a negative and positive impact on student character building and depends on the teacher and the student learning environment. In line with Suriadi's research, Massie's research [3] results explained that the character of students during online learning during the Covid-19 pandemic was very likely to decline, especially concerning discipline, honesty, and responsibility. However, it is different from Wahyuni's research results [4] which explains that in online learning during a pandemic, student characters can still be explored properly.

The credibility of the lecturer in carrying out learning is thought to have an important role, as the results of the study explained that the character building of students would be formed depending on the credibility of the teacher in carrying out learning [5]. Considering this character issue is a severe problem for this country, this research is very urgent when we want the future young generation to have good character. On that basis, this study aims to prove the role of lecturer credibility in forming student character. This is the research gap that this research is trying to fill, moreover, there has been no similar research conducted in Indonesia.

#### 2 Method

In general, data will be collected using a survey method using an electronic questionnaire. Electronic questionnaires are intended to reach students who are required to do online learning caused to the COVID-19 pandemic. The data collected will be tabulated and analyzed quantitatively.

Data analysis in this study used Partial Least Square Structural Equation Modeling (PLS-SEM). In addition, PLS-SEM also tends to be chosen by researchers because PLS-SEM allows them to estimate complex models with many constructs, indicators, and structural paths without requiring data that is normally distributed [6].

The two main stages in analyzing the output results in Smart PLS v 3.2.9 [7] are the evaluation of the measurement model and the evaluation of the structural model [8, 9]. The measurement model evaluates how the suitability of indicators forms the construct, while the structural model evaluates the relationship between existing constructs.

However, because the model in this study has a sub-construct, the model in this study uses Hierarchical Component Models (HCM) with Partial Least Square Structural Equation Modeling (PLS-SEM). Thus, the model testing broadly consists of 3 stages, the first is the measurement of convergent validity, internal consistency reliability, and discriminant validity in the lower model (first-order) [8]. After it is known that the lower model has feasibility, the following evaluation continues on how first-order constructs can form second-order constructs. In this research model, there are two types of constructs at once: reflective and formative. In a reflective construct, the path coefficient will be considered as loading, while in a formative construct, the path coefficient will act as a weight. After these two stages are passed, then we can evaluate the inner model.

#### **3** Results

Table 1 shows the measurements of convergent validity, internal consistency reliability, and discriminant validity in first-order constructs. It can be seen in Table 1 that almost all indicators have a loading above 0.6, where this number acts as a cut-off value for

 Table 1. Measurement of Convergent Validity, Internal Consistency Reliability, and Discriminant Validity

Latent Variable	Indicators	Loadings	AVE	Composite Reliability	Cronbach's Alpha	Discriminant Validity
		> 0.50	> 0.50	0.60–0.90	0.60–0.90	HTMT confidence interval does not include 1
Teacher Credibility						
Competence	Comp1	0.841	0.794	0.958	0.955	Yes
	Comp2	0.852				
	Comp3	0.908				
	Comp4	0.864				
	Comp5	0.872				
	Compt6	0.864				
Goodwill	GW1	0.777	0.645	0.915	0.886	Yes
	GW2	0.845	-			
	GW3	0.566				
	GW4	0.728				
	GW5	0.759				
	GW6	0.846				
Trustworthiness	TW1	0.884	0.772	0.953	0.94	Yes
	TW2	0.839				
	TW3	0.883				
	TW4	0.894				
	TW5	0.790				
	TW6	0.819				
Character Traits						
Self-control/discipline	SC1	0.693	0.588	0.851	0.766	Yes
	SC2	0.699				
	SC4	0.627				
	SC5	0.666				
Responsibility	R1	0.732	0.63	0.872	0.805	Yes
	R3	0.671				
	R4	0.700				
	R5	0.741				

(continued)

Latent Variable	Indicators	Loadings	AVE	Composite Reliability	Cronbach's Alpha	Discriminant Validity
		> 0.50	> 0.50	0.60–0.90	0.60–0.90	HTMT confidence interval does not include 1
Integrity/fairness	I2	0.610	0.708	0.829	0.589	Yes
	I6	0.685				
Cooperation	C1	0.583	0.564	0.838	0.742	Yes
	C2	0.622				
	C4	0.774				
	C6	0.608				
Compassion/empathy	Cp1	0.772	0.58	0.84	0.743	Yes
	Cp3	0.377				
	Cp4	0.759				
	Cp5	0.732				

 Table 1. (continued)

the feasibility of the indicator [8]. Although it seems that some still have the values below, some experts still allow the use of indicators that have a loading below 0.6, as long as they do not interfere with the AVE value. The AVE value needed to determine the feasibility of the outer model is 0.5. Table 1 also shows that all variables that act as first-order constructs have AVE values above 0.5. For Composite Reliability, the required value is above 0.6 and Cronbach's Alpha. Table 1 shows that all lower model constructs have values above 0.6. To see the feasibility of discriminant validity, HTMT is used [9]. According to Henseler et al. [9], HTMT values in all models are not allowed to have a number 1. The measurement results also show that HTMT has feasibility because based on the measurements made, none has a value of 1.

After the evaluation of the lower constructs has been completed, the evaluation will continue on the higher constructs (second-order). In this research model, teacher credibility is a formative construct, so the path coefficient will be considered a weight. Meanwhile, the character traits variable is a reflective construct so that the path coefficient will be considered as loading. For weight, the appropriate value is 0.1 [10], and for loading, it is 0.6 [8]. Table 2 shows that all first-order constructs show a sufficient value for the feasibility of second-order constructs. Table 3. Hyphotesis Testing And Effect Size.

This study aims to answer whether there is an influence between Teacher credibility on character traits. Table 3 shows that teacher credibility positively and significantly influences character traits. In addition to the path coefficient, it is also necessary to measure the Q2 effect size to determine the predictive relevance of each construct [11, 12]. A value of 0.02 means it has a small predictive relevance value, whereas 0.15 and

Construct level		Weight	Loading	t	Mean	Standard
Second-order construct	First-order construct	-				Deviation
Teacher	Competence	0.398		28.946***	0.398	0.014
Credibility	Goodwill	0.305		22.451***	0.305	0.014
	Trustworthiness	0.425		30.021***	0.425	0.014
Character	Self-control/discipline		0.868	42.426***	0.869	0.02
traits	Responsibility	ess         0.425         30.021***         0.425         0.1           discipline         0.868         42.426***         0.869         0.1           xy         0.869         39.889***         0.871         0.2	0.022			
	Integrity/fairness		0.74	17.264***	0.743	0.043
	Cooperation		0.861	40.326***	0.863	0.021
	Compassion/empathy		0.769	20.64***	0.774	0.037

Table 2. Weights And Loading Of First-Order Constructs On Second-Order Constructs

 Table 3. Hyphotesis Testing And Effect Size

Hyphotheses	Coefficient	Mean	Standard Deviation	t	p value
Teacher Credibility - > Character traits	0.485***	0.485	0.075	6.440	0.000
$f^2$ effect size			·		
Teacher Credibility - > Character traits	0.307	0.331	0.133	2.310	0.021
R <sup>2</sup> effect size	,				
Character traits	0.235	0.241	0.072	3.253	0.001
Teacher Credibility	1.000	1.000	0.000	68778.816	0.000
$Q^2$ effect size			·		
Teacher credibility	0.569				

**Notes:** \*\*\*Significant at 0.001 level based on 5,000 bootstraps; \*\*significant at 0.01 level based on 5,000 bootstraps; \*significant at 0.05 level based on 5,000 bootstraps

0.35 means medium and large, respectively. From Table 3, it is known that teacher credibility has great predictive relevance because it has a value above 0.35 (Fig. 1).



Fig. 1. Research model with coefficient

### 4 Conclusion

Based on data analysis, it is known that the variable teacher credibility plays a key variable in the formation of student character. The credibility of lecturers is formed by the constructs of competence, goodwill, and trustworthiness. Moreover, the characters included in the construct of character traits are discipline, responsibility, integrity/honesty, cooperation, and empathy.

Based on the research findings and the model formed so that students can have discipline, responsibility, integrity, and empathy, the researcher suggests that lecturers should set an example in front of students of good qualities. The qualities that lecturers should possess so that their students have good character are competence in the subjects taught, good intentions, and creating a sense of trust among the students. This is considered as essential, because the absence of it, it is hard to expect students to have ideal traits or characters as expected.

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