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## **International comparison of vocational pre-service teachers' character education in Indonesia and Malaysia**

**Amat Jaedun<sup>1\*</sup>, Nuryadin Raharjo<sup>1</sup>, Arum Dwi Hastuningsih<sup>1</sup>, Sutarto<sup>1</sup>, Galeh Nur Indriatno Putra Pratama<sup>1</sup>, Alias bin Masek<sup>2</sup>**

<sup>1</sup>Universitas Negeri Yogyakarta, Indonesia

<sup>2</sup>University Tun Hussein, Malaysia

\*Corresponding Author: [jaedun@uny.ac.id](mailto:jaedun@uny.ac.id)

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### **ABSTRACT**

This study examines the commitment of vocational teacher education students at Universitas Negeri Yogyakarta, Indonesia, and Universiti Tun Hussein Onn Malaysia (UTHM) in applying core character values. The global trend in teacher education links education and economic growth, emphasizing students' competence for the job market. However, teachers are also expected to address social and moral cohesion in the younger generation. The research involved 177 third- and fourth-year students at FPTV UTHM Malaysia and an equal number at FT-UNY, utilizing a questionnaire based on core character values. The findings indicate moderate commitment levels (58.75%) among university students. UTHM students scored slightly higher (2.42) than UNY students (2.28). The study shows that character education for vocational teacher education students in both Indonesia and Malaysia has not reached optimal levels, emphasizing the need to investigate more effective character education models for future vocational teachers.

**Keywords:** character education, vocational pre-service, teacher, Indonesia, Malaysia

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## **INTRODUCTION**

Character education has become a critical issue in facing the rapidly changing world. It aims to educate students to have values that encourage them to live harmoniously with others and face challenges in the future. It also aims to help students develop future goals related to the skills they should possess after graduation (Dishon & Goodman, 2017).

The introduction highlights the crucial role of teachers in the learning process, emphasizing their responsibility in choosing effective teaching strategies (Ayua, 2017; Department of Education and Training, 2019). Teachers play a central role in building students' character and creating individuals with strong principles, courteous interactions, intelligent argumentation, and grace in daily life. The need for quality teachers is recognized both nationally and internationally, with efforts focused on improving pre-service teacher education.

Globally, the trend in teacher education revolves around the quest for quality educators (Kholisoh et al., 2023; Singh et al., 2021), with a heightened emphasis on the preparation of teachers capable of delivering high-quality education to enhance student learning outcomes and school effectiveness. The focus varies between countries, with Australia prioritising teacher quality for improved student outcomes (Naylor et al., 2017; Nguyen & Yang, 2018), while the United Kingdom places increasing expectations on teachers to address social cohesion issues among the youth.

Furthermore, the global tendency in teacher education emphasises the economic aspects (Hanushek & Wößmann, 2007), focusing on developing competencies needed for the job market. The commodification of education has become a global phenomenon, with standardised agendas driving educational reforms in countries like the United States, the United Kingdom, and Australia (Gouëdard et al., 2020). This has led to implementation managerial systems stressing high accountability for teachers and schools, competitive structures, and strict adherence to standards, leaving little room for teacher autonomy or students' social development (Medina & Suthers, 2008). The impact of marketisation and commodification is particularly evident in higher education, including pre-service teacher education, where the tyranny of market forces is keenly felt (Gardošiková, 2021; Mufidah, 2019). The introduction sets the stage for exploring the challenges and dynamics within the context of teacher education framed by these global trends (Skovsgaard et al., 2018).

In Indonesia, the government has given special attention to developing teacher professionalism through in-service teacher education. The basis for this is Law Number 14 of 2005 concerning Teachers and Lecturers, and the teacher and lecturer certification program began in 2007. However, this certification program is criticised for its inability to significantly enhance teacher professionalism. Several studies on teacher professionalism emphasize the importance of teachers guiding moral (Kusmaryani et al., 2018) and behavioral aspects of students, serving as role models (Bahman Bijari et al., 2016). In the era of Industry 4.0, there is a demand for teachers who possess knowledge and exhibit positive character traits (Kearney & Levine, 2020; Lase, 2019; Siagian, 2020).

Despite these efforts, some teachers still fail to meet ethical standards and positive conduct (O'Neill & Bourke, 2010). Therefore, teachers' character and personality preparation should commence early during their tenure as prospective teacher students. Students play a crucial role as agents of change in achieving national development goals (Thamrin, 2020), and higher education institutions are responsible for shaping students who are faithful, possess noble characters, and have positive personalities.

The significance of higher education extends beyond intellectual and skill development (Chan, 2016); it should also focus on shaping individuals with positive character traits, an entrepreneurial spirit, and social responsibility. Thus, higher education in Indonesia should concentrate on forming individuals with positive character traits, an entrepreneurial spirit, and social responsibility (Nurhayati et al., 2019).

On the other hand, research by Hasanah (2013) indicates that the education system in Indonesia tends to focus on developing cognitive intelligence. The education system is heavily oriented towards exams, including mid-term exams, final exams, and national exams. Mulyadin & Jaedun (2019) note that the current education system in Indonesia insufficiently emphasizes character/moral education, placing more emphasis on intellectual improvement and less on building students' personalities and morals. The Indonesian education system continues to face difficulties in putting character education policies into practice, and there are still significant obstacles in the efforts to raise student learning outcomes (Kurniasih et al., 2016).

Teachers play a crucial role in society, not only transferring knowledge but also imparting character values during teaching. They must motivate students to practice values such as honesty, tolerance, harmonious living, and other character traits. This remains an unanswered challenge for teacher education programs, including pre-service teacher education, as they must deliver knowledge and shape their students' character (Glanzer et al., 2003). A pre-service teacher is someone prepared to educate students in schools (Juuti et al., 2018; Nguyen & Yang, 2018; Reid & Reid, 2017). Each country employs different systems and methods to better prepare teachers for the future.

In addition, character education is a global concern, including in Indonesia, prompting some countries to implement character education in their schools (Turan & Ulutas, 2016; Kisby, 2017; Tutkun et al., 2017; Anggraini & Kusniarti, 2016). In Turkey, some teachers use storybooks to teach characters to students, reporting positive responses from their students, who can identify moral values and behaviour in stories (Turan & Ulutas, 2016). Teaching character values in universities is essential, especially for those who are involved in pre-service teacher education.

Therefore, graduates hoping to become teachers must understand how character education is taught effectively in higher education institutions (Leavy, 2016; Park, 2017). Despite the knowledge and skills acquired, noble values are essential to demonstrating the quality of university graduates, particularly for prospective vocational teacher students. The Faculty of Engineering at Universitas Negeri Yogyakarta (UNY) and the Faculty of Technical and Vocational Education at Tun Hussein Onn University Malaysia (UTHM) primarily aim to produce vocational teacher candidates and technology experts. The future workforce requires individuals who care about humanitarian values, the environment, and social well-being. Thus, prospective vocational teacher students must be equipped with noble values and character, which should be developed through education.

To evaluate the success of character education at both universities, this research aims to answer the following research questions: (1) What is the level of commitment among prospective vocational teacher students in both universities to implement core character values? and (2) Are there differences in the level of commitment among prospective vocational teacher students in both universities to implement these core character values?

## **METHOD**

This international collaborative research involved vocational teacher candidates from the Faculty of Engineering at Universitas Negeri Yogyakarta, Indonesia, and the Faculty of Technical and Vocational Education at Universiti Tun Hussein Onn in Malaysia. The survey research was conducted using a questionnaire to measure the commitment of vocational teacher candidates to practising core character values in their daily lives as students. The main research question was whether vocational teacher candidates in both engineering faculties are committed to applying core character values. The research sample included third- and fourth-year students randomly selected from UTHM (N= 177) and UNY (N= 177).

The questionnaire was developed based on core character values derived from the reference values and standards of the programs in both universities. The instrument was developed as a closed questionnaire with 64 items reflecting 18 core character values. Respondents' answers were collected using a rating scale with four response options: never (N), rarely (R), quite often (QO), and very often (VO). The data collection instrument was developed through an online platform, shared through social media group links, and in a print version distributed directly to respondents.

Research data were analyzed using descriptive statistics to calculate the mean and standard deviation. An equivalent sample t-test was used to compare students' commitment levels in universities to applying core character values. The interpretation of research data results was based on the percentage of the student's commitment level in practising core character values, based on the mean value against the maximum score, with four categories, which can be seen in Table 1.

**Table 1. Student commitment to implement core character values**

No	Commitment Level (%)	Category
1.	$X > 75$	High implementation level
2.	$50 < X \leq 75$	Moderate implementation level
3.	$25 < X \leq 50$	Low implementation level
4.	$X < 25$	Very low implementation level

This section presents data on the characteristics of the study subjects, describing the distribution of the sample based on gender, semester level, grade point average (CGPA), and the participation and position of students in extracurricular activities on campus. The subsequent section presents the research results related to the main problem of this study, which is the level of vocational teacher candidates' commitment in both universities to apply core character values in their daily lives on campus, and it concludes with a comparison of their commitment level.

## **FINDINGS AND DISCUSSION**

### **Findings**

Out of 354 students as respondents, 54.2% were female, and 45.8% were male. This result represents the composition of male and female students in both universities. An analysis of the semester level shows that 52.5% of respondents are fifth-semester students (third year), while 47.5% are seventh-semester students (fourth year). Furthermore, the analysis based on the student's academic performance indicates that more than half of the sample (53.4%) has a CGPA of 3.50 or higher, 41.2% have a CGPA between 3.00 and 3.50, and only 5.4% of respondents have a CGPA less than 3.00. Data on the respondents' distribution based on CGPA are presented in Table 2.

**Table 2. Student's CGPA achievement**

CGPA	Frequency	Percent (%)
Higher than 3.50	189	53.4
Between 3.00 - 3.50	146	41.2
Less than 3.00	19	5.4
Total	354	100.0

Moreover, the result indicated that most students (67.8%) had joined at least one or two co-curricular activities in their school; 41.8% had joined as organizational members and 26.0% as committee members. The remaining 32.2% have not participated at all. Details are shown in Table 3.

**Table 3. Position held in an organization/club/association**

Position held in campus organization	Frequency	Percent (%)
Yes, as an organization member	148	41.8
Yes, as a committee member	92	26.0
Not at all	114	32.2
Total	354	100.0

### ***Level of commitment to implement core character values***

The analysis results indicate that the level of commitment to implement core character values by vocational teacher candidates in both universities, UNY and UTHM, falls into the moderate category, with a mean score of 2.35 on a scale of 1 – 4 (commitment level of 58.75%) and a standard deviation of 0.38. Students in both universities have practiced good character by showing a relatively high commitment to characteristics such as gratitude with a mean of 2.569 (64.23%), respect with a mean of 2.53 (63.25%), responsibility with a mean of 2.470 (61.75%), and cleanliness with a mean of 2.467 (61.68%). However, both groups of students show a low level of commitment to independence, with an average of 1.99 (commitment level of 49.75%), public spiritedness, with an average of 2.016 (commitment level of 50.40%), and entrepreneurship, with an average of 2.112 (commitment level of 52.80%). The students' mean values and commitment levels to implement core character values are presented in Table 4.

### ***Comparison between Indonesian and Malaysian student's practice of noble characters***

A comparison was made to see the difference between UNY and UTHM students in practising noble characters. Data was in good normality at a skewness level within the range for both samplings (UTHM= -.22; UNY= -.085). Descriptive data indicated that UTHM's students have a slightly higher mean score at 2.42 (s =.41) compared to their counterparts at 2.28 (s =.34). Further analysis using an independent t-test has resulted in a significant difference in mean score between both students from UTHM and UNY [t (352) = 3.47, p = .001]. In this case, the result suggests that students in UTHM practice higher noble characteristics than UNY students. Data analysis is indicated in Tables 5 and 6.

**Table 4. The mean score for students' character constructs**

Character values	N	Mean	Std. Deviation	Commitment level (%)
Cooperation	354	2.412	.477	60,3
Independence	354	1.990	.546	49,75
Humility	354	2.289	.498	57,23
Respect	354	2.530	.466	63,25
Justice	354	2.449	.492	61,23
Freedom	354	2.401	.521	60,03
Cleanliness	354	2.470	.477	61,75
Diligence	354	2.396	.519	59,9
Gratitude	354	2.569	.498	64,23
Rationality	354	2.414	.466	60,35
Public Spiritedness	354	2.016	.715	50,4
Honest	354	2.299	.527	57,48
Courage	354	2.380	.530	59,5
Takwa	354	2.329	.560	58,23
Responsible	354	2.467	.474	61,68
Smart	354	2.410	.485	60,25
Entrepreneurship	354	2.112	.693	52,8
Leadership	354	2.349	.567	58,73
Total mean		2.351	.381	58,78

**Table 5. A descriptive mean score between UNY and UTHM**

	Group	N	Mean	Std. Deviation	Std. Error Mean
mean_all_Construct	UTHM	177	2.420	.411	.0309
	UNY	177	2.281	.336	.0253

**Table 6. Independent samples test**

	Equal variances	t	t-test for Equality of Means			
			df	Sig. (2-tailed)	Mean Diff	Std. Error Diff
mean_all_Construct	assumed	3.470	352	.001	.13851	.03991
	not assumed	3.470	338.722	.001	.13851	.03991

Based on the dominant character values chosen, namely gratitude, cleanliness, responsibility, and respect, further analysis was conducted to understand the results more deeply. Interestingly, students at UNY have practiced character values with a higher average in gratitude with a mean of 2.63 ( $s = .45$ ) compared to their counterparts at UTHM with a mean of 2.51 ( $s = .53$ ). Further analysis using an independent t-test showed a significant difference in the practice of gratitude for both groups of students [ $t(352) = -2.219, p = 0.027$ ]. Similarly, the groups differ significantly in terms of the value of cleanliness. However, the values of responsibility and respect did not differ significantly. The data are shown in Tables 7 and 8.

**Table 7. Descriptive statistics for selected higher characters**

	Group	N	Mean	Std. Deviation	Std. Error Mean
Gratitude	UTHM Malaysia	177	25.104	.53305	.04007
	UNY Indonesia	177	26.271	.45401	.03413
Cleanliness	UTHM Malaysia	177	25.405	.48045	.03611
	UNY Indonesia	177	23.992	.46471	.03493
Responsible	UTHM Malaysia	177	25.028	.49380	.03712
	UNY Indonesia	177	24.313	.45277	.03403
Respect	UTHM Malaysia	177	25.574	.51798	.03893
	UNY Indonesia	177	25.028	.40688	.03058

**Table 8. Independent samples test**

	Equal variances	t	df	Sig. (2-tailed)	Mean Diff	Std. Error Diff
Gratitude	assumed	-2.219	352	.027	-.11676	.05263
	not assumed	-2.219	343.308	.027	-.11676	.05263
Cleanliness	assumed	2.811	352	.005	.14124	.05024
	not assumed	2.811	351.610	.005	.14124	.05024
Responsible	assumed	1.421	352	.156	.07156	.05036
	not assumed	1.421	349.384	.156	.07156	.05036
Respect	assumed	1.103	352	.271	.05461	.04951
	not assumed	1.103	333.305	.271	.05461	.04951

**Discussion**

The research findings indicate that the level of commitment of prospective vocational teacher students in both universities, UNY and UTHM, in applying core character values falls into the moderate category, with a commitment level of 58.78%. This suggests that character formation efforts through education for the students at both universities have not yet yielded optimal results and require improvement.

The analysis also reveals that students in both universities have practiced good character by showing a high commitment to character values such as gratitude with an average of 2.57 (commitment level 64.25%), respect 2.53 (commitment level 63.25%), responsibility 2.47 (commitment level 61.75%), and cleanliness with a mean of 2.467 (commitment level 61.68%). However, both groups of students show low commitment levels to self-reliance, with an average of 1.99 (commitment level 49.75%); public spiritedness, with an average of 2.016 (commitment level 50.40%); and entrepreneurship, with an average of 2.112 or a commitment level of 52.80%. Independence is one of the important character that is the ultimate goal of the education process. This aligns with the Indonesian government's policy on strengthening character education, aiming to create a cultured nation through strengthening religious, honest, tolerant, disciplined, hardworking, creative, independent, democratic, curious, nationalistic, patriotic, appreciating achievement, communicative, peace-loving, fond of reading, caring for the environment, caring for social issues, and responsible values (Presidential Regulation number 87, 2017).

Steinberg (2014) independence is the ability to perform, be accountable for one's actions, and build supportive relationships with others. Meanwhile, Curren (2016), Muhtar and Dalyono (2020) states that independence is a skill that develops throughout an individual's life span, greatly influenced by experiential and educational factors. According to Hafina et al. (2022) characteristics of independence include the ability to determine one's destiny, creativity and initiative, behavior regulation, responsibility, self-control, decision-making, and problem-solving without influence from others. Steinberg (2014) divides independence into three aspects: emotional independence, behavioral independence, and cognitive independence. Emotional independence involves changes in emotional attachment relationships that occur between individuals and others, such as emotional relationships with family members, especially parents. A student can be said to have emotional independence if the student can detach emotionally from dependence on parents or other adults. Therefore, students living in dormitories generally show better levels of emotional independence than those living with parents or in their family environment. Students living in dormitories must live and settle in a new environment with new people. They must strive to adapt and adjust to the dormitory environment, allowing them to develop emotional independence.

Behavioral independence, according to Steinberg (2014), is the ability to make decisions without relying on others and to do so responsibly. Dormitory life requires students to be able to carry out activities and solve problems independently without the intervention of others. Behavioral independence is not only reflected in the behavior of students who can do everything on their own but also in their ability to take responsibility for their actions. Students' ability to guide themselves when considering a problem or conflict will be hindered if they lack behavioral independence.

Results from a study by Wahab et al. (2013) on 350 students living in Kuala Lumpur dormitories revealed that 39.7% of students had depression, 67.1% had anxiety, and 44.9% had stress. The study also found that academic problems and interpersonal relationships were the most significant predictors of stressors that could lead to depression, anxiety, and stress in students. Students with good academic independence are better able to adapt to academic life, minimize symptoms of depression, engage in social adjustment, and have better academic motivation.

With the improvement of transportation facilities in the Yogyakarta region and surrounding areas, some students who reside not too far from campus choose to continue living with their parents and families. This is especially related to efficiency in living expenses and facilitates parental supervision. Currently, the percentage of students living in dormitories is decreasing due to the increasing cost of living in dormitories. This is believed to affect the level of student independence, which is only moderate.

Students in both universities also show low commitment to public spiritedness, with an average of 2.016 or a commitment level of 50.40%. In this regard, Furqon (2010) proposed several indicators that can be used to describe social care character, including (1) concern for others, (2) respecting others, (3) respecting the rights of others, (4) cooperating with others, and (5) being willing to help and assist others. The character of social care can be developed through the learning process, campus culture, and both intra- and extracurricular activities.

### ***The role of Lecturers in developing students' character***

To foster social concern, the role of lecturers is crucial. In addition to fulfilling the primary tasks of higher education, which include teaching and research, lecturers also play a significant role in community service. In this context, lecturers are knowledge transmitters and central figures in shaping and developing students' character. Through personal examples, lecturers can be good role models for students, especially in instilling noble values such as honesty, integrity, empathy, and social responsibility.

Lecturers shape students' character by demonstrating openness to various perspectives. In the dynamic academic world, differences of opinion are common. Lecturers who can manage and facilitate these differences among students create a healthy environment for discussion and critical thinking. Students are taught to appreciate opinions that align with their own and understand and respect different, even opposing, viewpoints. This attitude is crucial for fostering tolerance, which is the foundation of social concern (Ampartzaki, 2023; Gamage et al., 2021).

In community service, lecturers act as agents of change by connecting the academic world with the broader society. Through service programs that involve students, lecturers encourage students to engage directly with communities, understand existing problems, and seek innovative and practical solutions (Darling-Hammond et al., 2020; Gleason et al., 2011; Hollister et al., 2022). This gives students real-world experience and instills social responsibility and concern for others. Students involved in community service activities become more sensitive to social issues, such as poverty, educational inequality, and environmental problems. Ultimately, this fosters individuals who are concerned about their communities and capable of making meaningful contributions to society.

Lecturers also play an essential role in teaching humanitarian values (Gamage et al., 2021; Sciences, 2013; Wang, 2023). Through daily interactions, both inside and outside the classroom, lecturers can exemplify how to approach differences with wisdom and respect for diversity. This is particularly important in the era of globalization, where cultural, religious, and social background differences are more apparent. Respecting differences is a moral principle, and a critical skill needed in a pluralistic society.

Thus, lecturers do not only play a role in the academic aspect of students but also in shaping their broader character. Lecturers can instill social concern in students through personal example, openness to differences, and community service. This is crucial in shaping a young generation that is not only academically intelligent but also highly socially responsible, ready to contribute to creating a better and more just society.

Through these roles, lecturers contribute to creating a generation that is not only knowledgeable but also socially conscious, capable of facing global challenges with an inclusive

attitude and committed to positively impacting the communities around them. Therefore, lecturers are highly strategic in preparing future leaders who are caring and responsible.

### ***Entrepreneurial character and unemployment among university graduates***

Research findings indicate that students in both universities exhibit a low commitment to implementing entrepreneurial values, with a commitment rate of 52.80%. National workforce data from 2020 reveals that many university graduates tend to seek employment rather than create job opportunities for themselves. This contributes to rising unemployment rates in Indonesia, particularly among university graduates.

Entrepreneurship is defined as an attitude, spirit, and ability to create something new and valuable for oneself and others (Othman et al., 2020; Supardi et al., 2022). University graduates are expected to have an entrepreneurial mindset that leads them to create job opportunities. However, research suggests that many students have a strong motivation for entrepreneurship influenced by their parents' occupations rather than formal entrepreneurial training.

Factors such as perceptions of entrepreneurship, social support, knowledge, and technical skills also influence students' entrepreneurial interests. Therefore, it is crucial for universities and lecturers to encourage and empower students to develop entrepreneurial characters through learning, training, and social support. Mamun et al. (2019) highlight the knowledge and technical skills that entrepreneurs should possess, including managerial skills (planning, organizing, motivating, and supervising), conceptual skills (formulating goals, policies, and business strategies), human skills (understanding, communication, sociability, empathy), and time managerial skills (time management).

Despite the moderate achievement in character education at both universities, character education remains crucial for preparing a quality next generation, encompassing intellectual, skill, and moral aspects. Character studies should extend beyond moral virtues, particularly in the current era of Industry 4.0 and the 21st century. The World Economic Forum (World Economic Forum, 2018) has developed a framework for 21st-century education consisting of 16 essential skills for students to thrive and succeed in the future. These skills are categorized into foundational literacies, competencies, and character qualities.

The foundational literacies (Ainoutdinova et al., 2022; Dufva & Dufva, 2016; Lestari & Aulia, 2018) are literacy (basic reading and writing skills), numeracy (mathematical and analytical skills), scientific literacy (understanding of scientific skills), ICT literacy (proficiency in information and communication technology), financial literacy (understanding financial principles), and cultural and civic literacy (awareness of cultural and civic issues). The competencies that must be fulfilled include Critical thinking and problem-solving (analytical and problem-solving abilities), Creativity (ability to think creatively and innovate), Communication (effective communication skills), and Collaboration (ability to work collaboratively). The qualities of character that must be fulfilled consist of the following aspects. Curiosity (desire to learn and seek knowledge), initiative (capacity to start tasks independently), persistence/grit (ability to persevere and overcome challenges), adaptability (flexibility in facing external changes), leadership (ability to lead a group towards common goals), social and cultural awareness (recognition and response to social and cultural diversity) (Bruggeman et al., 2019; Rozak et al., 2023; Villacís et al., 2022).

To prepare graduates for the challenges of their time, it is essential to go beyond moral character education and instil these six character qualities. This holistic approach ensures that students develop well-rounded skills and qualities necessary for success in the 21st century.

In line with this, Nicholls (2017) argues that students' abilities in knowledge and skills (hard skills) are essential predictors of an individual's competence, proving highly valuable for entering the workforce. However, this knowledge and skills may become obsolete in future jobs, whereas character qualities will remain useful for various professions. Nicholls (2017) identifies six crucial skills for surviving in the era of the fourth industrial revolution and the 21st century: character qualities: mindfulness, curiosity, courage, resilience, ethics, and leadership.

In the grand design of character education, it is stated that character education is a process of cultivating and empowering learners to possess noble values and character behaviour,



conducted through three education centres: family education, school education, and community education. Learners at the higher education level (students) are individuals who are already adults, especially as many students no longer live with their parents. Thus, the role of family education diminishes. On the other hand, the role of society and the environment becomes more significant because the individual is considered an adult and independent. Meanwhile, the role of the campus will also increase according to its level of involvement in activities on campus, both curricular and extracurricular.

Therefore, the role of higher education institutions is crucial in shaping students into independent and responsible individuals. Unfortunately, research results show that the level of independence among students at both universities is the lowest compared to other core character values. This indicates that vocational education students at both universities do not yet possess a high level of independence and are still easily influenced by their living environment, social media, and especially peer influence.

Literature suggests three main strategies for integrating core character values into higher education: incorporating character values into the learning process, department and program management, and student activities (Hasanah, 2013). Given the average level of commitment among vocational education students in applying character values falling within the moderate category, it can be assumed that one or all three integration strategies may be facing implementation challenges. Data on students' participation in extracurricular activities show that 32.2% of vocational education students at both universities are not involved in any extracurricular activities. This significantly affects the effectiveness of the character education integration strategy into extracurricular activities. Similarly, data on students' membership in student organizations indicate that 51.1% of students are only involved in student organizations as members.

Pratomo (2023), Seider et al. (2013), Vaccarezza & Niccoli (2019) suggests that character education through formal education channels is more effective than informal and community education. This is because character education through formal education channels is more programmed and results more measurable. However, character education through formal education channels is also vulnerable to failure, resulting from (a) programs that are not suitable for learners, (b) educators or teachers lacking competence, (c) a lack of good role models from educators, (d) a lack of communication and insufficient support from parents; and (e) schools or educators being unable to evaluate their programs effectively.

Based on the findings of this research, which indicate suboptimal success in character education at both universities, it is necessary to examine and evaluate the role of lecturers in shaping the character of their students through learning. One policy implemented at Universitas Negeri Yogyakarta emphasizes that every lecturer must design learning to develop three domains of learning outcomes: cognitive, affective, and psychomotor. However, specific affective values that need to be developed and how to develop them are not explicitly defined. This is suspected to be an unidentified cause of the suboptimal character education program at the Faculty of Engineering, UNY.

## **CONCLUSION**

The research findings on the commitment of vocational teacher candidates at FT UNY, Indonesia, and FPTV UTHM, Malaysia, reveal the following: First, the level of vocational teacher candidates' commitment to implement core character values on campus at both universities, UNY and UTHM, falls into the moderate category with an average commitment level of 58.75%. This result indicates that the success of character education conducted on vocational teacher candidates at both universities has not been optimal.

Second, character education programs in both universities are designed to be implemented through integration in the learning of each course, program management, and student activities. Therefore, further investigation is needed to explore the success and challenges of implementing character education programs through these three channels. In-depth research should be done to

find character education models and approaches to better prepare future-ready vocational teachers among candidate teachers at both universities.

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