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## Mastery Level of Interpersonal and Intrapersonal Skills Among Prospective FPTV Teachers

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### ABSTRACT

Education transformation certainly makes the role and duties of teachers larger, more challenging and more complex. Effective interpersonal and intrapersonal communication skills are extremely important for a teacher in the delivery of education, classroom management and student interaction. This study aimed to examine the level of mastery of interpersonal and intrapersonal skills of future teachers on FPTV. The respondents to this study were 175 final year teachers and they covered all the courses offered in FPTV. The questionnaire was used as a research instrument. Data were analyzed using statistics in terms of frequency, percentage, mean score, standard deviation, Independent T-Test and Pearson correlation. The findings of the study have shown that the highest level of mastery of interpersonal skills is teamwork and the highest level of mastery of intrapersonal skills is the domain of personality. However, presentation skills, listening skills, emotional intelligence and spiritual intelligence are at a moderate level. The study also reported that there was no significant difference in the level of interpersonal and intrapersonal skills based on gender. Finally, a few proposals for future studies were made, including making comparisons for skills between teachers teaching at the secondary school level and vocational colleges. It aims to find out the level of skill difference that teachers have in the two kinds of schools. Besides, it is recommended to focus on increasing the number of studies on technical instructors, as the search results indicate a scarcity of research on the level of engineering abilities among technical teachers. Given that BPLTV is a prominent aspect of education in Malaysia, it is imperative to undertake more regular studies on BPLTV teachers.

### Keywords:

Interpersonal, intrapersonal, teamwork, presentation; listening, personality, emotional intelligence, spiritual intelligence

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## 1. Introduction

The transformation of education has certainly made teacher roles and tasks bigger, more challenging, and more complex. An educator needs to be constantly aware, prepared and informed of the latest developments to manage the administration well and achieve academic goals to meet

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the demands of education managers [1]. Teachers will also take on different positions in the school as informants, specialists, advisors, substitutes for student parents and role models for students.

According to Gardner's Multiple Intelligence Theory, interpersonal knowledge is described as the ability to communicate with and understand others while intrapersonal is the ability to recognize and understand feelings, desires, motivations, and intentions [2]. Effective interpersonal and intrapersonal communication skills are crucial for a teacher to disseminate education, classroom management and interact with students in the classroom. Teachers need to teach students to have different thinking approaches [3]. Effective teaching sessions need to be in line with students' abilities and abilities, so a teacher needs to practice communication skills that motivate students towards their learning process [4].

### *1.1 Problem Statement*

Within the realm of education, schools are currently confronted with the ongoing difficulty of providing high-quality instruction. Essentially, the presence of competent teachers is crucial for schools, as the performance of the institution and the academic success of students are contingent upon the teacher's role [5]. When it comes to the revitalization of education, there is no aspect more crucial than the endeavor to enhance the caliber of teachers [6]. Various factors, including students' background, degree of ability, and IQ, have an impact on their academic progress [7]. However, it also pertains to the efficacy and productivity of the relationship between the teacher and student during the process of teaching and learning. An effective teacher-student connection necessitates the establishment of trust, respect, and a genuine interest in the subject matter, which in turn fosters heightened commitment and dedication to the teacher's instruction [8].

There are several factors that influence students' academic achievement, such as their background, level of ability and intelligence [9]. In fact, it is also related to the effectiveness and efficiency of the interaction of teachers and students during the teaching and learning process [10]. Good teacher-student relationships should build trust, respect, and ultimately create interest in the subject that leads to increased commitment and dedication to the teaching of a teacher [8].

The findings of the study from Agyapong *et al.*, [11] revealed that schoolteachers often experience conflict, low morale, and depression because of their leadership style of leadership authority and lack of effective communication. Depression is one of the emotional problems, which when not well managed can cause them to despair and increase their aggressive behaviour. The school environments can be viewed as dysfunctional because educators have identified potential communication barriers as lowering teacher achievement and organizational achievement. As a result, teachers are not enthusiastic about conducting teaching and learning and often release students' anger.

Looking at the intrapersonal side, male teachers are less empathic and trustworthy, less sensitive, and fierce than female teachers who are caring, concern, compassionate, and gentle [12]. For a technical teacher, they are not only expected to be involved in teaching and learning in the classroom, but also in the use of laboratories, equipment and machines that require high security supervision. In addition, laboratory teaching must be adequately prepared and non-existent, or the purpose of teaching will not be achieved [13]. Unlike science subjects, technical teachers are not assigned to have laboratory assistants. Therefore, technical teachers have a greater and greater role to play in producing quality human capital.

The scholar recognises the significance of possessing strong communication skills, including both interpersonal and intrapersonal abilities, to be an effective teacher, particularly during the teaching and learning process. The development of interpersonal skills will be centred around three primary

areas: teamwork skills, presentation skills, and active listening skills. In addition, intrapersonal abilities will be categorised into three other domains: personality, emotional intelligence, and spiritual intelligence. These skills will empower teachers to enhance their confidence when interacting with students.

Along with the problem statement above, this study is conducted aimed to identify the importance of communication skills involving interpersonal and intrapersonal skills to be a quality teacher especially in the teaching and learning process. Interpersonal skills will be focused on three main domains: teamwork skills, presentation skills and listening skills. Intrapersonal abilities are further classified into three domains: personality, emotional intelligence, and spiritual intelligence, which allow a teacher to gain confidence when interacting with a pupil.

### 1.2 Conceptual Framework

A conceptual framework can be characterized as the ultimate outcome that integrates multiple interconnected concepts to elucidate or forecast a certain occurrence, or to provide a more comprehensive comprehension of a phenomenon or research quandary [14].

The conceptual framework depicted in Figure 1 encompasses three primary indicators that pertain to the interpersonal skills under investigation. These indicators include team skills, stretching skills, and hearing skills. Additionally, the framework places emphasis on intrapersonal abilities, specifically personality, emotional intelligence, and spiritual intelligence. Ongoing research is being conducted to investigate the potential correlation between team skills and personality traits. The indicators of interpersonal and intrapersonal abilities serve as the foundation for examining the competencies of future teachers at FPTV, with the aim of cultivating advanced talents.

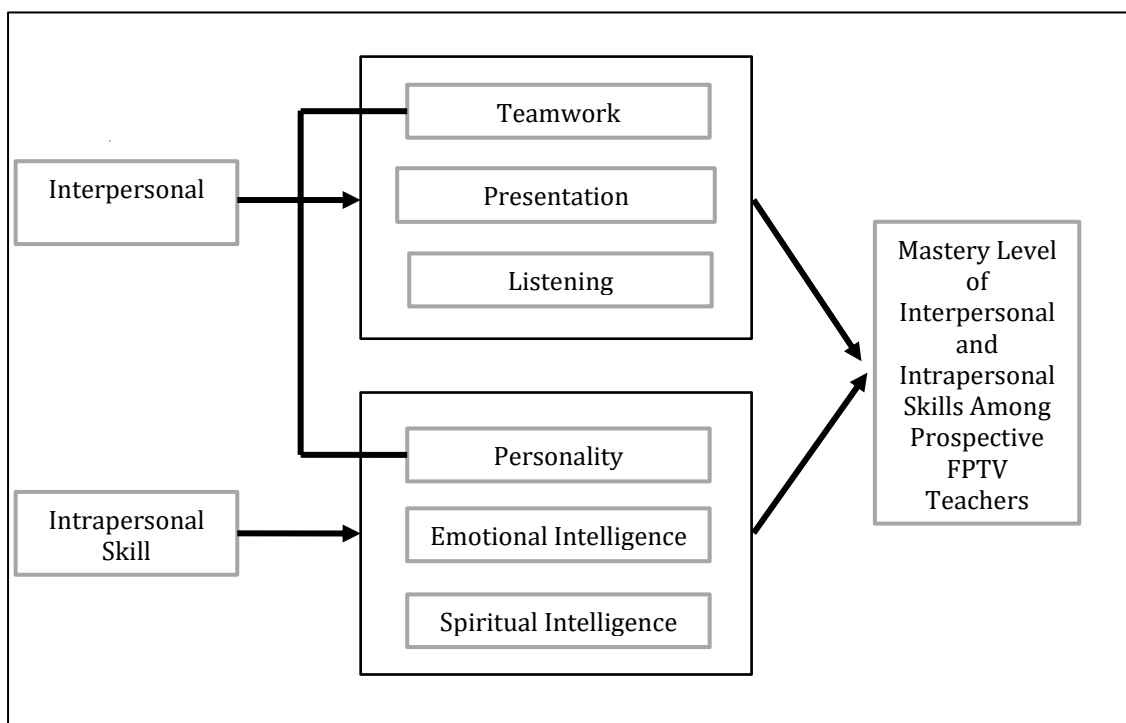


Fig. 1. Conceptual framework study

## 2. Methodology

This study used a questionnaire form. The instrument was a questionnaire adapted and modified from previous studies. Prior to the development of the research instrument, the construction process involved three stages, namely the first constructions of interpersonal and intrapersonal skills, the second was the construction of items for each construct and the third was the validity process.

### 2.2 Sample Study

The study sample consisted of 175 pre-teachers in the Faculty of Technical and Vocational Education at UTHM. This study uses a simple random sampling method. Random sampling is easy to select to ensure that every subject in the population has the same opportunity to be selected as the respondent of the study.

### 2.2 Pilot Study

30 respondents were chosen, of which 28 were from the Catering course while the other two were from the Building Construction course. Data from the pilot study was collected within two days after the form was distributed. As a result of the pilot study, statistical analysis of reliability coefficients should be performed to determine whether the questionnaire instrument is good and suitable for use in the actual study.

The researcher has cited the reliability scale which suggests that for the initial investigation, the reliability should be 0.60 or higher [15]. Reliability scores of 0.90 and above indicate good dependability, scores between 0.70 and 0.90 indicate high reliability, scores between 0.50 and 0.70 indicate moderate reliability, and scores below 0.50 indicate low reliability [16]. This pilot study has demonstrated that the reliability scale of six structures is remarkably high, ranging from 0.71 to 0.90.

Table 1 shows the results of the reliability coefficient analysis of this study. The results of the analysis indicate that for this study instrument, the reliability coefficient is high. So, there are no items that need to be removed for study.

**Table 1**  
Reliability values for pilot study

Element	Item	Cronbach's Alpha
Teamwork Skills	7	0.88
Presentation Skills	7	0.77
Listening Skills	7	0.81
Personality	7	0.62
Emotional Intelligence	7	0.78
Spiritual Intelligence	7	0.90

### 2.3 Methods of Analyzing Data

Inferential statistics is employed to draw conclusions about a population based on a sample or to describe the characteristics of a sample taken from its population. Additionally, it can be utilized to describe relationships, differences, predictions, and factors among the variables under investigation. Given that the normality test yielded normal results, the parametric test has been applied in this study, as indicated in Table 2. The Independent T-Test was used in the Piaw [17] study to assess the presence of a statistically significant disparity in the minimum score between two distinct groups of samples within the study. The Pearson correlation will be employed in this study to examine the association between two variables. This choice is since the data has successfully undergone a normality test, indicating that the data follows a normal distribution.

**Table 2**  
Methods of analysis of study data

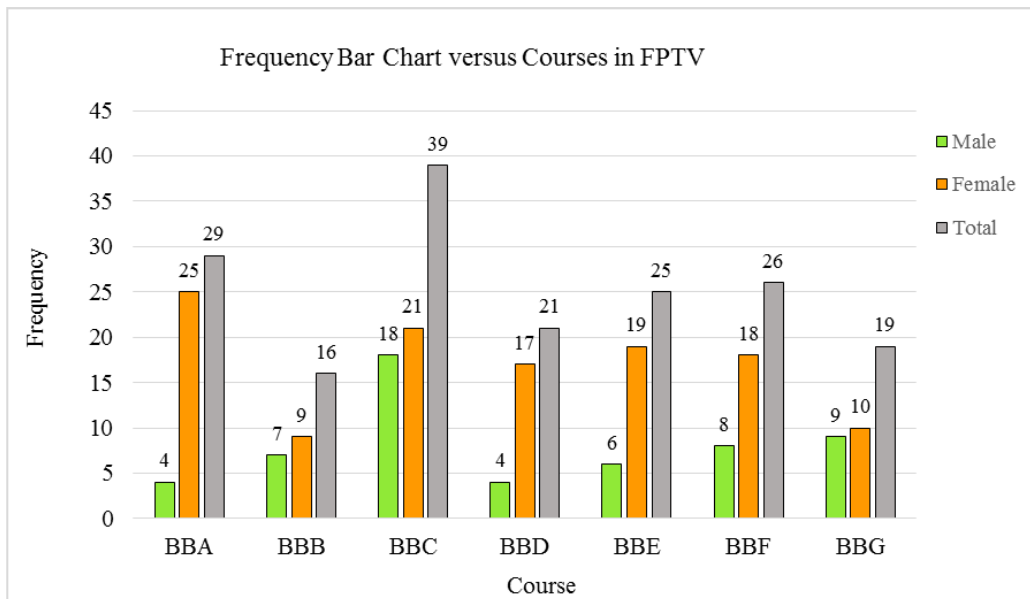
No.	Research Questions	Method of Analysis
1	What is the level of interpersonal skills among FPTV teachers?	Mean score and standard deviation
2	What is the level of intrapersonal skills among FPTV teachers?	Mean score and standard deviation
3	Is there a difference in the level of interpersonal skills among pre- teachers in FPTV based on gender?	Independent T-Test
4	Is there a difference in the level of intrapersonal skills among pre- teachers in FPTV based on gender?	Independent T-Test
5	Is there a relationship between the level of team skills and personality among pre- teachers in FPTV?	Pearson Correlation

### 3. Results

The main purpose of this quantitative method research study was to study the level of interpersonal and intrapersonal skills among FPTV pre-teachers. The study used questionnaires consisting of three main constructs namely Part A: Demographics, Part B: Interpersonal skills and Part C: Intrapersonal skills.

#### 3.1 Demographic Profile Analysis

Subsequently, seven areas of specialization were analysed, and the findings of the study are shown in Figure 2. It shows a list of courses based on the number of pre-teachers who answered the questionnaire form. The study found that the Catering course (BBC) had the highest frequency of 39 (22.3%) respondents followed by Operational Machining (BBA) of 29 (16.6%) respondents. The lowest courses involved in this survey were from Building Construction (BBB) course with only 16 (9.1%) respondents.



**Fig. 2.** Frequency bar chart for each undergraduate course in FPT

### 3.2 Descriptive Analysis of Interpersonal and Intrapersonal Skills

The average score over the entire domain is compared to identify the skills with the greatest minimum scores, as determined by the completed survey. According to the analysis conducted, the mean values for the entire dataset are presented in Table 3. The data clearly indicates that the domain of team skills exhibits the greatest average score for interpersonal skills, with a mean of 4.32. Conversely, the domain of presentation skills demonstrates the lowest average score, with a minimum of 3.20. The domain with the greatest mean score (3.80) for intrapersonal abilities is personality, whereas the area with the lowest mean score (3.52) is emotional intelligence.

**Table 3**

Total mean and standard deviation by domain

Construct	Domain	Mean	Level	SD
Interpersonal	Teamwork Skills	4.32	High	0.36
	Presentation Skills	3.20	Moderate	0.55
	Listening Skills	3.91	High	0.35
Intrapersonal	Personality	3.80	High	0.21
	Emotional Intelligence	3.52	Moderate	0.49
	Spiritual Intelligence	3.59	Moderate	0.48

### 3.3 Inference Analysis on Gender Differences

The statistical analysis used to study the differences is the Independent T-Test which is the most accurate test to answer the third and fourth questions as all data are normal. The Independent T-Test is the most suitable statistical test for addressing the third research issue. According to the data presented in Table 4, the Sig (2-tailed) values indicated that there was no statistically significant difference in teamwork skills ( $p = 0.616$ ,  $p > 0.05$ ). In line with the findings of the T-test analysis, it was observed that the presentation skills exhibited significant values of 0.211 ( $p > 0.05$ ). Similarly, the listening skills did not demonstrate any gender-based differences, as indicated by significant values of 0.40 ( $p > 0.005$ ). The T-test results in this study indicate that there were no statistically significant variations observed in the degree of interpersonal skills between genders. The results of

this investigation supported the null hypothesis established in this research, as all statistically significant values exceeded the threshold of 0.05.

**Table 4**  
 Independent T-Test for interpersonal skills by gender

Domain	Gender	Mean	SD	t	Sig. (2-tailed)
Teamwork Skills	Male	4.34	0.15	0.502	0.616
	Female	4.31	0.43		
Presentation Skills	Male	3.12	0.47	-1.256	0.211
	Female	3.23	0.58		
Listening Skills	Male	3.95	0.27	0.843	0.400
	Female	3.90	0.38		

Additionally, the Independent T-Test was employed to address the fourth research question. The outcomes of this test, as presented in Table 5, indicated that the analysis aligned with the findings of the third study. The null hypothesis was accepted as the significance values for all intrapersonal skill domains, namely personality ( $p = 0.14$ ), emotional intelligence ( $p = 0.71$ ), and spiritual intelligence ( $p = 0.81$ ), met the threshold of 0.05. This finding indicates that there is not a statistically significant difference in the degree of intrapersonal skills among pre-teachers in the FPTV programme based on gender.

**Table 5**  
 Independent T-Test for intrapersonal skills by gender

Domain	Gender	Mean	SD	t	Sig. (2-tailed)
Personality	Male	3.77	0.22	-1.470	0.14
	Female	3.82	0.21		
Emotional Intelligence	Male	3.48	0.42	-0.371	0.71
	Female	3.51	0.52		
Spiritual Intelligence	Male	3.60	0.37	0.235	0.81
	Female	3.58	0.52		

### 3.4 Inference Analysis on Relationships between Teamwork Skills and Personality

This study aims to examine the correlation between two primary domains, namely team skills and personality, through the application of inference analysis. This study aims to ascertain whether the domain of the relationship has an impact on the personality domain. The Pearson correlation test is applied to address the fifth inquiry, given that the survey data have a normal distribution.

The Pearson correlations presented in Table 6 indicate a significant association between teamwork and all five Big Five personality traits. The observed correlation coefficients for extraversion and agreeableness exhibited weak negative correlations, with values of -0.158 and -0.197, respectively. Based on the observed statistical significance, it was determined that the extraversion feature ( $p = 0.370$ ,  $p > 0.01$ ) did not exhibit a statistically significant association. Unlike agreeableness, the significance of the association between teamwork and agreeableness is less than 0.01, suggesting that the relationship is meaningful despite the negative and weak correlation. Nevertheless, the analysis of the relationship between teamwork abilities and conscientiousness revealed a weak connection ( $r = 0.130$ ), which did not reach statistical significance ( $p = 0.087$ ,  $p >$

0.01). Moreover, the analysis of correlations between neuroticism ( $r = 0.075$ ) and openness ( $r = 0.078$ ) revealed that there was no statistically significant link observed between these two factors.

**Table 6**  
 Mean correlations between teamwork skills and Big Five personality

		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Teamwork Skills	Pearson Correlation	-0.158	-0.197	0.130	0.075	0.078
	Sig. (2-tailed)	0.370	0.009	0.087	0.324	0.302
	N	175	175	175	175	175

\* Correlation is significant at 0.01 (2-tailed)

In summary, the previous research inquiry has been effectively addressed by the utilisation of Pearson correlation analysis to examine the association between teamwork skills and personality traits. According to the data presented in Table 9, the correlation coefficient ( $r$ ) is -0.580 and the corresponding significance value ( $p$ ) is 0.447 ( $p > 0.01$ ). These results indicate that there is no statistically significant association between teamwork and personality in the present study. Hence, it can be concluded that the null hypothesis, which claims that there is no statistically significant correlation between the level of teamwork abilities and personality among FPTV pre-teachers, is supported by the findings of this study.

**Table 6**  
 Mean correlations between teamwork skills and overall personality

		Personality
Teamwork Skills	Pearson Correlation	-0.580
	Sig. (2-tailed)	0.447
	N	175

#### 4. Discussions and Recommendations

The purpose of this study was to assess the proficiency of FPTV pre-teachers in interpersonal and intrapersonal skills. FPTV is a renowned institution that has successfully recruited numerous instructors to serve in educational institutions, including schools, community colleges, and polytechnics. The purpose of the tool is to assess instructors' proficiency and their capacity to handle challenges or stress. The study also sought to ascertain the degree to which teachers interpersonal and intrapersonal skills varied according to gender, as well as the correlation between these skills.

In general, the study revealed that teamwork skills exhibited the highest level of interpersonal skills, although personality traits were shown to be more prominent in intrapersonal skills compared to other domains. The study's analysis of statistical data gathered using the Independent T-Test revealed no significant differences in terms of gender. Indeed, the study revealed a lack of substantial correlation between teamwork and personality, suggesting that these two dimensions do not exhibit any overlap or mutual influence. Aligned with the National Philosophy of Education, it is imperative to place greater emphasis on these qualities for future educators who will assume the responsibility of serving the current generation, as teachers serve as the primary exemplars for students within the educational setting.



The outcome of collaborative efforts within a school team significantly influences the overall functioning of the educational institution. In the study conducted by Kolleck *et al.*, (2021), it was shown that collaboration can facilitate the enhancement of teachers' communication skills, self-esteem, and confidence through group interactions. The results of this study are corroborated by Baeten and Simons (2014), Krammer *et al.*, (2018), and Kunnari (2018), who have demonstrated that as team members become more acquainted with one another, the level of collaboration will correspondingly rise.

According to the Big Five personality traits, extraversion and conscientiousness are characterised by elevated levels. The study's results are corroborated by previous research conducted by Kang *et al.*, [22], Grover (2024), and [25]. These studies indicate that teachers who possess extraversion traits do not have an impact on the components of stress, specifically emotional fatigue, and discomfort. Instead, these characteristics are believed to contribute to the development of healthy and stable social relationships among teachers and enhance the effectiveness of classroom activities. Additional teachers may possess more readily available options to address some stressors, such as obtaining assistance from others. Extraverts are characterised by their amiable, collaborative, dynamic, and communicative nature when engaging with others.

Considering the outcomes of this study and the support of previous research data on the importance of interpersonal and intrapersonal skills, pre-teachers who aspire to advance their career as teachers should consider the following advice. Here are a few examples: Teachers will perpetually require the assurance and bravery to deliver any presentation or speech before a substantial crowd. It is widely recognised that educators consistently engage in public speaking, necessitating a diverse range of changes and intonation in their instructional delivery [26]. In addition, it is imperative for educators to consistently augment their creative abilities when delivering presentations, including a diverse array of contemporary technological applications outside the confines of PowerPoint [27]. Furthermore, they should incorporate pertinent graphics and images that align with the subject matter being presented.

Furthermore, the teacher's emotional intelligence will also impact their behaviour. Educators must consistently acknowledge their own emotions, aptitudes, limitations, and individual aspirations. Plus, it is vital for pupils to possess the ability to regulate their emotions in response to various circumstances, exhibit a fervent drive for achievement, and demonstrate the capacity to comprehend and demonstrate empathy towards the emotions and sentiments of others.

Moreover, it is common for university teaching methods to adhere to conventional teaching methods and approaches [28]. In certain instances, it is advisable for faculty members to promote the use of diverse pedagogical approaches to cultivate the qualities of a graduate among students in their institution. Teaching should adopt a comprehensive, learner-focused, and problem-oriented methodology, incorporating activities such as collaboration, case studies, simulations, project assignments, and student presentations. It is imperative for educators to assume many responsibilities, including that of mentors, facilitators, and assessors, to effectively showcase and exemplify the practicality of soft skills [29]. By engaging in a diverse range of classroom activities, lecturers can identify each student as a distinct individual with their own unique talents, needs, and abilities [30].

## **5. Conclusion**

Teachers assume a significant position in contemporary society. The competences and skills of teachers have a significant impact on the success of students and are a crucial element of TVET institutions. Responsible educators serve as a means of ensuring the quality of student learning. In

Malaysia, the TEVT education system effectively addresses the shortage of skilled teachers in polytechnics, community colleges, and public skills training institutions. Hence, it is imperative to incorporate skill-based preparation among prospective educators to cultivate outstanding teachers who possess not just expertise but also a comprehensive set of competencies, particularly in the realm of interpersonal abilities.

The study's findings have been summarised and subsequently analysed to enhance the understanding of the research subject. The results unequivocally demonstrate that the team skills and personalities of prospective teachers at FPTV are of exceptional calibre, indicating their potential to excel as educators. However, it is crucial for them to acknowledge that there are numerous other skills that must be cultivated to achieve a harmonious equilibrium between spiritual, physical, and emotional aspects. Hence, the recommendations put out in this study will assist other researchers in enhancing and advancing their research, so yielding more precise and high-quality research findings for future reference, particularly for the direction of technical educators.

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