TEACHER PROFESSIONALISM: THE RELIABILITY OF THE QUESTIONNAIRE

*Mohd Aizat bin Abu Hassan Kamarudin bin Musa, PhD

Faculty of Management and Economics, Universiti Pendidikan Sultan Idris *q000624@siswa.upsi.edu.my

ABSTRACT

This pilot study was conducted to test the reliability of the Teacher Professionalism questionnaire which involved four dimensions, namely teachers' characters, commitment to change and continual improvement, subject and pedagogical knowledge, and obligations and working relationships beyond the classroom. The design of this study is a quantitative study using SPSS to test the reliability of the instrument by using Cronbach Alpha. A total of 100 respondents were involved with this study to answer the questionnaire. This questionnaire has 51 items and uses the Likert scale. Each item has four answer options namely the scale of the Likert scale from scale one which shows the respondents strongly disagree with the item's statement to scale four which shows the respondents strongly agree with the item's statement as stated in the questionnaire. This questionnaire was chosen by the researchers as it was used internationally and in Asian to evaluate the professionalism of the teachers there. Overall Alpha Cronbach Value for Teachers' Professionalism instrument with four dimensions is between 0.81 to 0.89.

Keyword: Validity, Reliability, Instrument, Questionnaire, Teacher Professionalism

INTRODUCTION

Education has become a vital apparatus for getting ready for quality human resources (UNESCO, 2010). Instruction is then speculated to grow profoundly learned workforce. In accomplishing this idea, proficient instructors are primary in planning age entering the focused workforce and partaking in the public arena. Henceforth, numerous nations and countries have underscored training as a "vehicle" to build up the learning society (Livingstone, 2004) and therefore the professionalism of teachers needs to be improved. The Philosophy of Teacher Education formulated by the Bahagian Pendidikan Guru (BPG) has also defined the direction and aspirations of teacher education as personal and well-meaning teachers, securing individual development, having a progressive, constructive and scientific perspective, ready to develop national vision, uphold high cultural heritage of the nation and nurturing a democratic and united, disciplined and progressive society (BPG, 2009)

Teacher professionalism is to provide a standard for teachers to determine the quality values that a teacher should possess. Good teachers are teachers who have admirable personalities, skills and a strong commitment to teaching and public service ethics and are sensitive to student needs and can serve as role models for educators (Alberts, 1974). Primary school teachers are a crucial element in primary school education, serves to ensure that education runs well and effectively in producing students who fulfil national education aspirations.

The changes that occur in the education system at the international level have an impact on the national education landscape and ultimately, the change is happening at the school level. Various approaches have been carried out by the Ministry of Education (MOE) through state education departments, regional education departments and schools in enhancing continuing professionalism. In addressing the needs of the 21st-century

education world in the face of many changes and challenges, teacher professionalism (TP) often is associated with the quality of education reflected in student achievement. Tichenor and Tichenor (2009) have developed a model of teacher professionalism to measure teacher professionalism in schools. This instrument consists of four dimensions, (i) teachers' characters, (ii) commitment to change and continual improvement, (iii) subject and pedagogical knowledge, and (iv) obligations and working relationships beyond the classroom.

PROBLEM STATEMENT

Professionalism is a vehicle for the pursuit of highly skilled and knowledgeable teachers through professional development, which accelerates and adapts changes in education policy and practice in many countries. Teachers at school have been introduced with various methods to enhance teaching professionalism involving three aspects of professionalism, knowledge and skills. Professionalism is to be of high value when individuals exercise their responsibility with dedication, selflessness or a willingness to choose a job. The teachers' professionalism closely related to the quality of education in several respects, such as the attitude and values of the teacher in teaching, for example, will influence the interests, beliefs and values of the students. Likewise, the approach used also affects students' behaviour, acceptance and understanding of learning. Firm value, together with belief and ethical spirit, has become an integral part of teacher professionalism (Hargreaves, 2003).

The Ministry of Education Malaysia (MOE) introduced a Teacher Professional Development Plan in 2016 as a guide for teachers to improve their professionalism. Highlights of the efforts made by the Government of Malaysia to improve professionalism and professionalism have also contributed to the needs of this research. Studies of teacher professionalism in Malaysia have been conducted, but there is still a lot of gaps to be fulfilled. This is because most studies involving specific teachers, such as trainee teachers, subject teachers, and overall teachers, are under-researched. Therefore, this study intends to test the level of reliability of the Teachers' Professionalism instrument to use as a testing tool.

RESEARCH OBJECTIVE

To study the reliability of the four dimensions of Teachers' Characters, Commitment to change and continual improvement, Subject and pedagogical knowledge and obligations, and working relationships beyond the classroom and the relevance of this questionnaire.

RESEARCH QUESTIONS

Is there reliability between the four dimensions of Teachers' Characters, Commitment to change and continual improvement, subject and pedagogical knowledge and obligations, and working relationships beyond the classroom and the relevance of this questionnaire?

CONCEPTUAL FRAMEWORK

This conceptual framework is built based on the theory of Sockett (1993). The teacher's career is said to be professional when it comes to four dimensions of professionalism: professional community, professional expertise, professional accountability, and ideal professional service (Sockett, 1993). Sockett (1993) identified five critical typologies of teacher professionalism: character, commitment to change and continuous improvement,

knowledge of the subject, pedagogical knowledge and responsibility, and working relationships outside the classroom. This dimension aims to analyse teacher quality practices. Teachers are also required to use different resources, adapt the directions as needed, and use various monitoring and evaluation strategies. Therefore, teachers can implement national education goals in providing good knowledge, skills, and character to the community (Sockett, 1993; Tichenor & Tichenor, 2005).

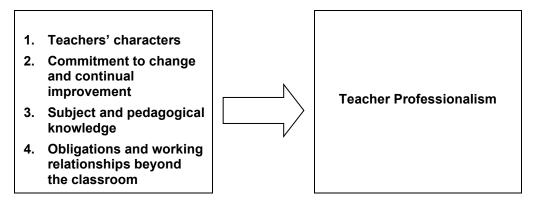


Figure 1: Conceptual Framework

LITERATURE REVIEW

Teacher Professionalism

Professionalism refers to the accountability, level of competence, and responsibility that a professional must hold (Parr, 2004). In the field of teaching, Robiah (2002) explains that professionalism is associated with quality, moral and ethical work practices. The practice of professional work includes professional behaviours such as commitment and adherence to ethical requirements, reflecting on teaching tasks, and a willingness to learn and develop continually. It also includes active and proactive involvement in promoting teacher professionalism, such as engaging in educational reform or change, teacher recognition, certification, management, and professional management, such as in deciding terms or criteria for working in the teaching or teaching profession. Many studies have conducted on professional teacher learning (O'Brien, 2016). For most teachers, the principles can be broader and contained in the goals and statements of the school mission (O'Sullivan & West-Burnham, 2011).

The field of teaching in Malaysia has its teaching code of ethics, as outlined in the Malaysian Teaching Professionals Code (KPM, 2016). The teaching code of ethics outlines teachers' responsibilities and responsibilities to their students, parents, the community, and the country, their colleagues, and their teaching career. As a professional, teachers need to have personal, social, and professional qualities and qualities such as fairness, friendly, assertive, dedicated, tolerant, sensitive, innovative, and so on. Teachers also need to have accountability for their behaviour, knowledge, skills, students, parents, education, and the country (Amir Hasan, 2009). The practice of values of professionalism in the teaching profession of the Malaysian Teaching Profession as a whole aim to create a knowledgeable, responsible and capable citizen who recognizes the importance of striving for truth and achieving high aspirations. Teachers must believe in the principles of the "Rukun Negara", the principles of democracy, and the freedom of the individual. It because society will be able to help young people understand the culture, acquire knowledge that has accumulated over time, and prepare them to face future challenges through the education world.

Recognizing the importance of teaching young people to make progress, teachers need to accept the ethics of a teacher as a guide to enable them to succeed in the profession to achieve high standards of achievement (KPM, 2016).

The four dimensions of the Teacher Professionalism model based on a study conducted by Tichenor and Tichenor (2009). The findings of the study show that there are four suitable dimensions and main features of the Teacher Professionalism Model and ideal for research context is like table 1.

Table 1: The Dimension of the Teacher Professionalism Model.

No.	Dimension	Description		
1	Teachers' characters	Personal (teacher) characteristics played minor moderating roles in influencing how teachers' workplace beliefs and perceptions were associated (Collie, Shapka, Perry & Martin, 2016)		
2	Commitment to change and continual improvement	Any professional to survive and grow in their field of specialization, it is imperative for them to get professional development (Mabagala, 2013).		
3	Subject and Pedagogical Knowledge	Subject knowledge which is knowledge and understanding of the subject itself. Pedagogic knowledge which is knowledge about how to apply the subject when teaching it (Shulman, 1986).		
4	Obligations and working relationships beyond the classroom	Reward, career development, education and training, as well as learning resources (Hasan, 2015)		

Validity and Reliability

Validity and reliability are crucial in defending the integrity of the instrument from defects (Ghazali & Sufean, 2018). Before the pilot test is conducted, the researcher should conduct the validity. Validity can be conduct is face validity and construct validity. The face validity is whether the gauge shows the validity of the survey respondents, and others who have less exposure to the measurement. This validity is to ensure item clarity, questions asked, adequate response time, and most importantly the item measures what should be measured (DeVellis, 2003). The construct validity is to see how well an instrument measures what should be measured accurately before the test is considered valid. Construct validity is the most complex as it is assessed using both statistics and practical procedures (Creswell, 2012). The purpose of the pilot study was to test the study benchmark against all variables to a selected set of samples based on characteristics similar to the actual sample. The pilot study was also to determine the suitability of the item to the condition of the sample. Items that are inappropriate, misunderstood or misleading need to be repaired or dropped (Chua, 2012).

RESEARCH METHODOLOGY

The questionnaire method was used to conduct the pilot study. A total of 100 teachers in Kuala Lumpur were randomly selected for this pilot study. These teachers are certified teachers in public school. Survey method through the questionnaire is prevalent for research in various fields, especially social science studies (Chua, 2012) and education (McMillan, 2012). The design of this study is quantitative to test the reliability of the Teacher Professionalism (TP) practice questionnaire. In the analysis of this study, researchers use

quantitative methods. Therefore, researchers use Alfa Cronbach to test the reliability index. The Cronbach alpha coefficient index approximating 1.00 indicates high reliability and consistency of the instrument.

POPULATION AND RESPONDENT

The population of this study is teachers who work with the Ministry of Education Malaysia (MOE) at public schools in Peninsular Malaysia. Based on teachers' projections obtained from MOE on April 30, 2018, the total number of teachers serving in Peninsular Malaysia was 178,498. Before the actual survey conducted, pilot studies were conducted to test the reliability and validity of the research instrument to use. This is to prevent confusion and identify the weaknesses of the built-in items (Creswell, 2014). To answer the reliability of this instrument, a total of 100 samples were randomly selected. There are scholars who recommend a pilot study sample of not more than 100 respondents or between 10 and 30 respondents or need to exceed 20 or a minimum data point of 100 or five times (Chua, 2012). Random sampling is chosen to respond to the instruments constructed and involve samples from various angles and areas (Creswell & Clark, 2011).

RESEARCH INSTRUMENTS

The questionnaire was adopted from Tichenor and Tichenor (2009) and Hasan (2015) and tailored for Malaysian teachers. This questionnaire was selected because it fits the theory of teacher professionalism by Sockett (1993). To make sure that the questionnaire used measures actually what is right, the validity of the face, content validity, as well as construct validity, is conduct (Ghazali & Sufean, 2016). There were 51 items in this questionnaire (Table 2) where each dimension had items between 11 and 15 that allowed respondents to give their perceptions concerning Teacher Professionalism (TP) in their perspective. Each item uses a Likert scale from a scale of one indicating that the respondent strongly disagrees with the item's statement. Scale four, which shows the respondents strongly agree with the item's statement, as stated in the questionnaire. The Likert scale uses with even number such four and six points because researchers want respondents to commit to either positive or negative scales and to avoid neutral. The Likert scale applied as one of the most fundamental and frequently used psychometric tools in educational and social sciences research (Joshi, Kale, Chandel & Pal, 2015).

Table 2: Teachers' Professionalism (TP) Instruments Questionnaire

No.	Dimension/Item				
	Teachers' Characters				
B1	Dress neatly.				
B2	Show confidence.				
B3	Show a positive attitude every day.				
B4	Respect for students and their ideas.				
B5	Set high standards for yourself and students.				
B6	Put students' welfare ahead of personal interest.				
B7	Excited to teach.				
B8	Behave ethics both inside and outside of school.				
B9	Considering the education of students as a primary task.				
B10	Exhibit personal responsibility for the quality of their own teaching.				
B11	A flexible person when working with students and/or teachers.				
B12	Keep calm in all situations related to school.				
B13	Can't wait to come to school every day.				
B14	Show creativity when working with a student.				
B15	See yourself as a lifelong learner.				

Commitment To Change And Continual Improvement

- **B16** Choose teaching strategies based on best practices in education and the latest research findings.
- **B17** Dedicated to teaching as a lifelong career.
- **B18** Make presentations at seminars, workshops, and/or conferences.
- **B19** Actively looking for professional development opportunities.
- **B20** Experiment with innovative teaching practices.
- **B21** Initiate a new program in the classroom to enhance student learning.
- **B22** Keep up with current social and political trends that influence education.
- **B23** Stay in your own field by reading journals and/or attending conferences and workshops.
- **B24** Regularly observe other teachers improve their own teaching.
- **B25** Accepting new ideas and changes.
- **B26** Engage in teacher research or action research to improve one's private practice.

Subject and Pedagogical Knowledge

- **B27** Teaching in a way that is compatible with the student's current developments.
- **B28** Understand how academic subjects relate to other topics.
- **B29** Understand the developmental needs of children.
- **B30** Make classroom decisions based on student needs.
- **B31** To know and apply the theory of human development and learning.
- **B32** Avoiding the disgraceful act of the student.
- **B33** Do self-reflection and analyse your own teaching.
- **B34** Regularly evaluate your own choices and actions in the classroom.
- **B35** Has extensive content knowledge in certified areas.
- **B36** Provide all students with a fair learning opportunity.
- **B37** Has extensive pedagogical knowledge.
- **B38** Consider all aspects of student life.
- **B39** Creating a positive learning environment for students.

Obligations And Working Relationships Beyond The Classroom

- **B40** It is a positive role model for students and teachers.
- **B41** Serves as a public reference in education.
- **B42** Actively participate in school committees and/or jointly make decisions for schools.
- **B43** Sharing ideas and teaching strategies with other teachers.
- **B44** Establish a friendly and cooperative relationship with parents.
- **B45** Collaborate with other teachers for the benefit of students.
- **B46** Respect other teachers and administrators.
- **B47** It helps to foster a positive work environment in the school.
- **B48** Talk about teaching philosophy with other teachers.
- **B49** Become a mentor or willing to mentor a new and experienced teacher.
- **B50** Active in the professional organization of the college.
- **B51** Participate in curriculum development.

RESEARCH PROCEDURES

The questionnaire adopted from Tichenor and Tichenor (2009) and Hasan (2015) sent to selected teachers as respondents of the study. Respondents are permanent teachers who have served at least one year. The questionnaire that has been completed will be retrieved and will be analyses using alpha Cronbach to obtain the reliability level. Teachers who become respondents for this pilot study will not be involved with actual studies to avoid pollution (Chua, 2006).

DATA ANALYSIS

The data obtained from the pilot study were analyses using Statistical Product and Service Solutions (SPSS) with internal consistency method and the method used was through a

calculation of the alpha coefficient of Cronbach instrument of study. Reliability is a concept of the consistency and stability of an instrument (Creswell, 2014). However, the reliability of the study instrument uses alpha Cronbach coefficients, where alpha values of 0.65 to 0.95 are satisfactory and adequate (Chua, 2006).

RESEARCH FINDINGS

The findings of this study were tested using the reliability value of Alfa Cronbach tested after the value of the correlation reading showed high levels of communication. The findings from this pilot study will be used to ensure that the instruments are robust and can be improved so that each construct to be tested can be accurately measured. A pilot study is the best way to determine the research done perfectly because it helps to solve the problem before the actual survey (Leedy & Omrod, 2011). Consistency refers to the high reliability of the built-in instruments, while stability is the freedom of error and results inconsistent results (Gay, Mills & Airasian, 2012). While Babbie (2014) and Sekaran (2003) state that reliability is the extent to which an instrument is reorganised to give a similar decision. Table 3 shows the reliability analysis of Professional Learning Community (PLC) instruments and alpha Cronbach coefficients showing alpha 0.967, which indicates that the instrument has high reliability. Accordingly, the alfa Cronbach reliability index for the teachers' professionalism (TP) of" teachers' characters of 15 items recorded alpha values at 0.89; commitment to change and continual improvement of 11 items recorded alpha values at 0.81; subject and pedagogical knowledge of 13 items recorded alpha values at 0.88 and obligations and working relationships beyond the classroom of 12 items recorded alpha values at 0.86. Generally, the alpha Cronbach reliability index for the dimension of the teachers' professionalism is higher than 0.60 and can continue to the next level.

Table 3: Reliability Analysis of Teachers' Professionalism (TP) Instruments

Dimension	ltem Number	Item Amount	Pilot Test Alfa Cronbach (α) Value
Teachers' Characters	B1-B15	15	0.89
Commitment To Change And Continual Improvement	B16-B26	11	0.81
Subject and Pedagogical Knowledge	B27-B39	13	0.88
Obligations And Working Relationships Beyond The Classroom	B40-B51	12	0.86

DISCUSSION AND IMPLICATION

This study was conducted to test the reliability level between teachers' characters, commitment to change and continuous improvement, subject and pedagogical knowledge, and participation in educational activities beyond the confines of the classroom. Reliability often referred to as internal stability and consistency (Creswell 2002, 2005, 2010; Pallant 2001; Sekaran 1992). The Cronbach Alpha value often applied to during the measurement of internal consistency of a construct (Cronbach 1946; Norusis 1977). The Cronbach Alpha value, which exceeds 0.60 often used as the reliability index of an instrument (Mohd Majid 1990; Pallant 2001; Siti Rahayah 2003).

For Bond and Fox (2015), items with a reliability value of below 0.60 need to repair and under 0.50 should be dropped. While alpha values between 0.60 to 0.80 are acceptable

and 0.90 to 1.00 is very good and useful with high consistency. Based on the above explanation, the researcher has used the Cronbach Alpha value to determine the reliability of the questionnaire. This shows that the four-dimensional teachers' professionalism model (Tichenor & Tichenor, 2009) model is suitable for use in research conducted by researchers. This questionnaire will be used in a research study involving public school teachers in peninsular Malaysia. The dimensions of the highest Cronbach Alpha value between the four dimensions are teachers' characters at 0.89. In conclusion, the findings show that the reliability index of the questionnaire instrument is high. This value means that this instrument is at an acceptable level and is well within its level of reliability.

CONCLUSION

Overall, this study has focused on specific methods to test the level of reliability of the Teachers' Professionalism questionnaire. At the pilot test stage, questionnaires that have been adopted and adapted to Malaysian teachers indicate that this questionnaire is suitable for use. Thus, this study can be continued to the next level and administered at 91 public schools in Peninsular Malaysia. Respondents were randomly selected and involved 728 teachers who had served at least one year. It aims to conduct studies involving dimensions of Teachers' Professionalism such as teachers' characters, commitment to change and continuous improvement, subject and pedagogical knowledge, and participation in educational activities beyond the confines of the classroom. If this study is conducted at the actual research level it can assess the level of professionalism of teachers in Peninsular Malaysia and thus provide opportunities for researchers to further enhance their professionalism of teachers.

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