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Teaching Quality and Performance Among Experienced Teachers in Malaysia

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Abstract: The role of teachers has evolved from merely being teacher-centered to one that is student centered and the skills required for a quality teacher are changing too. Assessing teacher's effectiveness will not be a straight forward attempt by solely examining students' achievements or students' perceptions of their teachers' attributes. A careful examination of the teaching concepts, one as a form of "labor and profession" (Firestone & Bader, 1991); or the other as a "craft and art" (Grimmett & MacKinnon, 1992) will indicate that it involves teacher's cognitive ability and interpersonal skills (soft skills) which enhance teacher's performance in the classroom. Furthermore, the National Framework for Professional Standards (MCEETYA, 2003) has outlined that teacher's professional value (quality and professional knowledge and skills) will impact the management of student's learning. Based on these concepts, this study investigated a teacher effectiveness model. The framework of this investigation measured the teacher's cognitive ability (skills of assessment and evaluation, IT skills, and co-curricular knowledge) and the teacher's personality or interpersonal skills (soft skills). The respondents were experienced teachers working in Malaysia. A set of questionnaires with 120 questions were constructed by the researchers and were administered among 2000 school teachers from different types of schools. However, only 1366 completed questionnaires were analyzed while 634 responses were removed due to incomplete data. Utilizing structural equation model (SEM), this study attempted to ascertain the validity of the structural model of which teacher's cognitive abilities and personalities predict teacher's performances. The results revealed a model fit with both cognitive abilities and personality predicting classroom management. Good personality alone, however, is insufficient in terms of enhancing the teachers' commitment and responsibilities towards their students unless it is complemented by the teachers' cognitive competency (cognitive abilities)

Introduction

Malaysian teachers are aware of the global challenges especially in preparing themselves to achieve the goal of the National Education Philosophy (NEP). Findings from research indicated that teacher quality is associated with students' performance. Good

teachers do not only display their competence in the subject area but also support their students in terms of displaying friendliness, optimism and creating a conducive learning environment. This ensures the quality of the human capital from the physical and spiritual sense. Currently, the Malaysian primary schools employ graduate teachers, whereas only college-trained teachers were required to serve these schools in the past. Concurrently, the Ministry of Education (MOE) is conducting curriculum reform which emphasizes on task and activity based classroom approaches. The current trend in teaching and learning suggests that active student participation and discussion enhance higher order thinking. Information technology (IT) skills are also given precedence to be integrated across all disciplines.

Teachers are also school managers who manage their students in and out the classroom. Thus, curricular and co-curricular activities must be planned and executed effectively to ensure students' holistic development (Abdul Rashid & Bokkasam, 2005). Statistics show that co-curricular activities increase students' success rate in high school (Gandolfo, 2011). However, are Malaysian teachers truly ready for the implementation of the co-curricular activities? Do they have sufficient proper training, knowledge and resources? The most important task for the teachers is their time management, which requires them to juggle curricular and co-curricular activities effectively. This study is intended to examine the effect of teacher qualities, namely personality and cognitive ability, on their classroom management, commitment and responsibilities. Hence the purpose of this research is to validate the proposed model of teacher quality on their performances among experienced teachers in Malaysia as represented in Figure 1.0.

Teacher Effectiveness

When teachers display good qualities they are considered effective. Quality teachers and effectiveness are intertwined with the same strands in the literature review with the stakeholders who determined teachers' effectiveness including students, principals or their peer. Past studies suggested that, teachers' effectiveness could be measured by the impact of teachers on students' achievement (Brophy, 1986; Darling-Hammond, 1999; Rice, 2003). On the other hand, teacher quality was also associated with high salary in previous years (Figlio, 1996). In the Malaysian context, low wages are no longer an issue as teachers are now better paid with high allowances. Measuring teacher quality has become very complex as it involves teaching preparation and confidence (Darling-Hammond, 2000), experience and knowledge (Goe, 2007; Schmidt & Hunter, 1983), pedagogical skills, positive attitude, as well as organized and managed classroom skills (Waxman et. al., 2003).

In reviewing the literature related to teacher quality models, Harris and Rutledge (2007) have concluded that the predictors of teacher quality and effectiveness are cognitive ability, personality attributes and educational background. For instance, a recent study conducted among new math teachers in New York found that teachers' cognitive ability, content knowledge, personality traits, and feelings of self-efficacy are among the determinants of students' outcome (Rockoff et al., 2008). However, the latest studies have also included elements, namely: teaching from the perspectives of profession, art, and labor. The concept of labor indicates that the work done by teacher at school must be accurately assessed by the administrators and school principals. Contemporary teachers in the 21st century are geared towards adopting and adapting new teaching theories and external policies and issues. As the policies keep changing and becoming uncertain at times, it is important that teachers make fast and good decisions in their teaching instructions. As a profession, teaching can be seen to include the technical knowledge which encompasses professional judgment that requires strong knowledge base or cognitive ability. Harris and Rutledge

(2007), in analyzing the teacher effectiveness model of the profession, elaborated that teachers who engage themselves professionally are more likely to participate in ongoing improvement. The third model of teaching as "crafts and art", indicates a focus on teacher-student interaction as well as the use of appropriate instructional techniques. This concept reflects the personality of the teachers which emphasizes the teacher-student relationship. However, the concepts of teacher effectiveness cannot be separated and defined distinctly. Thus, the current study was aimed at investigating the model of teacher quality from three dimensions: labor, profession, and art and craft.

Cognitive Abilities

In Malaysia, the Ministry of Education (MOE) has always emphasized recruiting smart candidates to be enrolled in the teaching profession. Measures have been taken to ensure that the right candidates will be shortlisted to fill these vacancies in schools. As a measure for ascertaining the candidate who is truly qualified for the teaching profession, an aptitude test known as *MEdsi* has been developed and pilot-tested several years for sound validity and reliability. The *MEdsi* consists of five components namely, the quantitative (30 questions, 30 minutes); English Language (25 items, 30 minutes); *INSAK* (psychological test, 135 items, 30 minutes); analytical (20 items, 30 minutes); and verbal components (25 questions, 30 minutes). This test is quite comprehensive as it has several cognitive components (quantitative, English Language, analytical and verbal components). Hence, it is evident that the Ministry of Education and the Ministry of Higher Education in Malaysia prioritized teachers' cognitive abilities as part of the teacher-trainee yearly intake requirements. This is consistent with studies that empirically supported that teachers' cognitive abilities do determine students' academic performance and effective classroom management (Rice, 2003; Khojastehmehr & Takrimi, 2009; Wayne &Young, 2003; Rockoff, Jacob, Kane & Staiger, 2008). Rice (2003) in her book entitled "*Teacher Quality: Understanding the Effectiveness of Teacher Attributes*" indicated that the teachers' literacy level and verbal abilities were significantly related to students' academic achievement /performance. A study by Khojastehmehr and Takrimi (2009) supports the fact that teachers' cognitive ability (knowledge) is important in determining the teacher quality and effectiveness. This fact is also supported by Wayne and Young (2003) who concluded in their study that "students learn more from teachers with certain cognitive characteristics (master the content-knowledge, know how to design and deliver their knowledge for a diverse classroom effectively)". In the same manner, Rockoff, Jacob, Kane and Staiger (2008) found that cognitive factors affect both teacher and students' performance. In summary, findings from these studies indicated that teachers' cognitive abilities have a causal relationship with classroom management and students' academic performance.

Teacher Personality

According to Polk (2006) highly effective teachers display certain personality traits which affect instructional and student achievement. In the past studies, Myers Briggs developed indicators for personality traits which focus on different aspect of traits and several inventories (Krueger 1972; Schmidt, Lewis, & Kurpius-Brock 1991; Teachout 2001; Wubbenhorst 1991). Other studies focused on collective individual behaviors, such as ambition, intelligence, sense of humor, (Erdle, Murray, & Rushton 1985; Henry & Rohwer

2004; Murray, Rushton, & Paunonen 1990; Teachout 1997) and some on teacher intensity or enthusiasm (Madsen, Standley, & Cassidy 1989; Yarbrough & Madsen 1998).

Previous studies on teacher personality attributes have found several profound personality traits among highly effective teachers. In examining selected studies on empirical studies of effective teacher and personality traits, Rachmer and Martin (2001) examined seven (7) personality traits: extraversion, approachable, outgoing, establishing a caring, loving and warm atmosphere with students, have a sound knowledge of subject matter, take a personal interest in each student, and enthusiastic personality with a sense of humor and 8 items reflecting teaching effectiveness. The findings indicated that effective teachers display extraverted traits, approachable, enthusiastic, and outgoing with a sense of humor.

Richardson and Arker (2010) employed the Connectivity by Design Interconnect Questionnaire (The Grant Company, 2007) which helps teachers and guidance counsellors to better understand their students and coworkers. The personality items were classified as Bridge Builder Style, Bottom Liner Style, Thinker Style and Energizer Style. The findings indicated that 67 percent of students scored moderately on each of the four styles. The remaining 33 percent were split fairly evenly among high scorers and low scorers - a pattern that held true across all four styles. Educators' results were less consistent across the four styles. Their scores only mirrored the students' scores for the Bridge Builder style, although Bottom Liner scores were fairly comparable between the two groups. Discrepancies among students and educators surfaced across the Thinker and Energizer Styles, it was found that educators scored more significantly higher on Thinker and considerably lower on Energizer when compared to students. This finding suggest that educators need to work on the Energizer component in order to keep abreast with their students.

Kneipp, Biscoe, and Richard (2010) examined the effects of teacher personality characteristics on students' perception via the Big Five Personality Test (Buchanan, 2001) which measures the five personality characteristics of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The stepwise linear regression equation was employed to measure how each personality factor predicts instructional quality, with each personality variable (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) as the predictor variables and instructional quality as the criterion variable. The results showed that agreeableness was the only significant predictor.

Khojastehmehr and Takrimi (2009) examined the characteristics of effective teachers from the perspectives of the English teachers. A 50-item researcher-constructed questionnaire was administered and the data were analyzed via Principal Component Analysis. The analysis yielded four constructs namely (a) instructional strategies (15 items), (b) communication (social) skills (8 items), (c) personal characteristics (8 items), and (d) knowledge (5 items). The factor loadings for personality attributes prioritized by the respondents were flexibility, supportiveness, kind and friendly, lovely character, warm and cheerful, just to all students, able to communicate to uninterested students, and tolerate usage of mother-tongue when facilitating students' participation.

John et al., (1991) classified teacher personality traits as agreeableness, conscientiousness, emotional stability, extraversion, and openness to experience. These traits were adopted by Barrick and Mount (1991) and gauged their relationship with job performance. The findings indicated that conscientiousness is found to be positively related to job performance.

Similarly, Danili and Reid (2006) and Ozel (2007) in their studies on the relationship between teachers' personality traits and students' academic performance found that teachers' personality traits do affect students' test performance.

However, teacher personality is not the same as any other job related areas. It requires religious values, moral and teaching ethics which are bound by the mission and vision of the

education philosophy. In summary, the above findings suggested that certain effective and quality teachers display certain personality traits such as conscientiousness, emotional stability, openess to experience, extraverted, approachable, enthusiastic, outgoing, sense of humor, thinker, supportiveness, warm, kind, friendly, just, cheerful, communicative, able to relate to uninterested students and tolerate usage of mother-tongue (Polk, 2006; Rachmer & Martin, 2001; Richardson & Arker, 2010; Kneipp, Biscoe & Richard, 2010; Khojastehmehrs & Takrimi, 2009; John et al, 1991; Barrick & Mount, 1991; Danili & Reid, 2006; Ozel, 2007).

Classroom management

Teachers' abilities to organize the classroom and manage their students' behaviors are prerequisites to effective classroom management. Teachers who are capable of managing their classroom effectively would reassure better educational outcome. This view is supported by Oliver and Reschly (2007) who suggested that teachers' ability to organize and manage students' behaviors would result in positive educational outcomes. Emmer and Stough (2001) were of the view that educators who are effective instructors would reduce or minimize highly disruptive classroom behaviors. Conroy, Sutherland, Snyder and Marsh (2008) found that students who are engaged in the learning process are less likely to demonstrate problem behaviors and more likely to engage in active and correct responses. In any learning activity, there is bound to be healthy competitions between the students. These healthy competitions enhanced leadership spirit and mutual understanding between the winning and losing teams. The winning team was awarded and the losing team stayed focus and continued with their work. The classroom was well under control. Zapatero, Maheshwari and Chen (2011) who examined the effectiveness of the collaborative learning environment in the classroom along with the testing methodologies noted that, there was a dramatic increase in the engagement level of students by the instructor as the classroom environments were changed each semester.

The combination of constructivist-based modifications to the instructional delivery plus the utilization of the tablet PCs within the InkSurvey Tool environment have made it possible and effective in creating a learner-centered, knowledge-centered community of inquiry where students are actively engaged in pursuing knowledge. Halawah (2011) who examined factors that motivate college students to learn from their perspective found that the teachers' personalities, teaching methodologies and positive classroom management are the main factors that motivate students to learn.

Commitment and responsibilities

Studies have suggested that teachers or instructors who are committed and responsible or accountable for their classroom and students would result in classroom and teachers' effectiveness. Numerous studies found that commitment and responsibilities ensure quality or effective classroom management and teaching effectiveness. In a survey conducted by Sturman (2002) on school teachers in primary and secondary schools, the findings indicated that secondary teachers are more responsible and involved rather than primary teachers. Moreover, the findings from this study also indicated that teachers' roles and responsibilities would have an impact on the teachers' quality of working life as well as their working hours. Sood and Anand (2010) examined the element of professional commitment among Bachelor of Education (B.Ed.) Teacher educators in Himachal Pradesh. Results showed that the level of professional commitment of B. Ed. teacher educators in Himachal Pradesh is moderate. Significant differences were found in professional commitment of B. Ed. teacher educators with regard to gender, marital status and teaching experience. However, qualified and non-

qualified teacher educators were found to have similar level of commitment towards their profession. Renolds (2008) examined specific teacher qualities associated with exemplary teachers as determined by pre-service educators seeking teacher certification. Also examined were: (1) gender differences in students' perceptions of exemplary teacher qualities as well as: (2) exemplary teachers' influences on students' decisions to enter the teaching profession. Education students selected five qualities (from a list of twenty) that best described their exemplary teachers and then ranked them. Findings revealed that students consider that a skilled teacher may be more able to be enthusiastic that their exemplary teachers demonstrate defining personality attributes that outweigh the importance of professional skills. "Enthusiasm" was ranked as the most important quality for males and females. A gender difference emerged having 41% of the males selected the personality characteristic of "enthusiasm" as a top five descriptor and an equal percentage of males selected "subject knowledge", a professional skill characteristic. No females chose professional skills as their top quality descriptors. Exemplary teachers were reported to positively influence students' achievement and pre-service educators' decisions to enter the teaching profession.

Theoretical Framework and Hypotheses

The current study was undertaken along a framework designed by Harris and Rutledge (2007). In the context of this study, teacher effectiveness was derived from the aspect of teacher via his or her profession. This study investigated the teacher effectiveness/quality model by predicting teacher quality based on his or her performances. The National Framework for Professional Standards of teaching in Australia (2003) outlined the attributes of professional practice: effective classroom management, interactive or effective communication with students and continuous improvement with respect of knowledge and best practices.

Findings from previous studies on best teacher performances (Brown, 2004) suggested several best classroom practices by teachers, namely: effective classroom management, commitment and responsibility. Brown emphasized that effective classroom management includes the teachers' ability to respond appropriately to the emotional, social, cultural, and cognitive needs of the students. Effective teachers manage their students by creating a conducive classroom environment in which students agree to respect their teachers and fellow students (high level of social tolerance). This high level of tolerance involves interpersonal skills which display care, respect, congruent communication process and assertiveness. Figure 1.0 presents the proposed model and the hypotheses of the relationships.

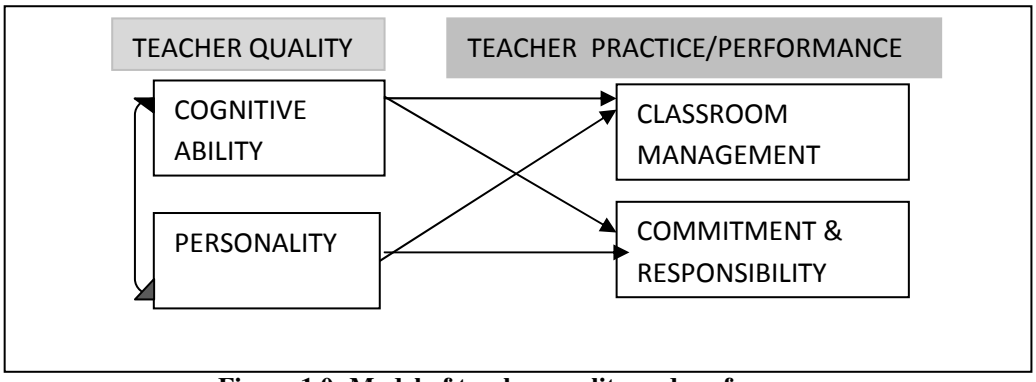

Figure 1.0: Model of teacher quality and performance

H1: cognitive ability significantly correlates with personality
H2: cognitive ability significantly influences classroom management
H3: cognitive ability significantly influences commitment and responsibilities
H4: personality significantly influences classroom management
H5: personality significantly influences commitment and responsibilities

Research Design

This study adopted a quantitative approach which included the survey method through the administration of questionnaires. Survey research determines and describes the way things are and compares how subgroups (namely male versus female and experienced versus inexperienced teachers) view issues and topics.

Respondents/Sampling Procedure

A random sampling procedure was used to determine the sample for this study. Random sampling was chosen to increase generalizability through wider participation of respondents and representative of the population. Representative sampling enables the researcher to generalize and make claims of knowledge about the population. According to Gay, Mills, and Airasian (2006) samples should be as large as possible; in general, the larger the sample, the more representative it is likely to be, and the more generalizable the results of the study are likely to be. To serve the purpose of this study, feedback and responses were obtained from teachers of various locations in Malaysia. They comprised secondary and primary schools teachers from the northern, central, southern, eastern, Sabah and Sarawak zones.

Instruments and data collection

A set of questionnaires with 120 questions were constructed by the researchers and administered among 2000 school teachers from different types of secondary schools in Malaysia. However, 634 copies of the questionnaires were discarded due to incomplete data and only 1366 completed questionnaires were analyzed. Sampling was based on stratified sampling procedure. The sample was selected based on the randomization of parliamentary

constituents of each state. From each constituent, rural and urban schools were selected. This questionnaire gathered responses on various aspects of effective teachers in Malaysia. Development of the questionnaires was based on the identified dimensions put together from the existing literature and the expert recommendations. The independent variables for this study were teacher quality represented by their cognitive ability and personality attributes. The cognitive ability has been identified as a three-factor model explained by the presence of IT skills, co-curricular activities and assessment skills. The dependent variables were commitment and responsibility. A five-point Likert scale (1 = strongly disagree to 5 = strongly agree) was used. Additionally, the demographic information namely gender, age, years of teaching experience and states/counties were also included.

Data Analysis Procedure

The Analysis of Moment Structures (AMOS) 7.0 software was utilized for the data analyses. The maximum likelihood was used to validate the structural model fit analysis. The model has been tested using second order confirmatory factor analysis where cognitive abilities construct has been measured via IT skills, co-curricula skills and assessment skills. Direct relationships were estimated to be i. cognitive abilities to classroom management. ii. cognitive abilities to commitment and responsibilities. Direct relationships of personality were determined by considering: i. classroom management and ii. commitment and responsibilities. Prior to the analysis, the Statistical Package for the Social Sciences (SPSS) 12.0 was used to provide the demographic detail and data distribution. Further, the confirmatory analyses (CFA) were utilized to confirm the items and their factors (reliability test). The model fit was based on the fit indices of Kline (2001) and Bryne (1998) of RMSEA < 0.08; GFI > 0.9; IFI > 0.9 with $p > .05$. However, due to 1366 samples remaining from the discarded ones, the significant p was not referred due to the sensitivity of the chi-square value. The relationships must be above the critical ratio of 1.96. All the violations of errors were also addressed before estimating the model with item loadings of 0.5 and above being selected.

Findings

This study intended to examine the effect of teacher qualities namely personality, cognitive ability, performance in classroom management, commitment and responsibilities. This study was based on the proposed model of teacher effectiveness by investigating teachers' self assessment of their own qualities as teachers and their performance as the outcome. The SPSS Version 12.0 was used to determine the descriptive statistics such as percentages, means and standard deviations. The distribution of data displayed indicates the selected demographic variables (data) of 1366 Malaysian teachers. Further analysis of structural equation model using AMOS (version 7.0) displayed the model-fit and significant relationships among the variables.

The Malaysian Teachers' Profile

In terms of the teachers' demographics, the variables examined were age, gender, academic background, specialization, working experiences, and the background of teachers' academic institutions. With respect to the teachers' age, Table 1.0 revealed the age

distribution that ranged from < 25 (6.2%) to >56 (0.4%). The majority of teachers were from the 36-40 years age group. However, the female population clearly outnumbered the males in the age group of < 25, 26-30 and 31-35. As for the older generation aged between 36-56 years, the male teachers markedly outnumbered the females.

All the teachers have completed their tertiary education. Most of them were basic degree holders (887 or 64.9%), followed by Diploma of Education (24.9%), Masters (3.7%) and Ph.D (0.1%). Other qualifications include certifications from various institutions (6.4%). The degree holders were mostly graduates from the public higher institution (721 teachers), while the rest were from private institutions (33 teachers), followed by Teaching College (80 teachers), United Kingdom (11 teachers) and United States of America (4 teachers). The rest obtained degree qualifications from other Asian countries.

			Gender		
			Male	Female	Total
age	<25	Count	12	73	85
		% within gender	3.6%	7.1%	6.2%
	26-30	Count	56	207	263
		% within gender	16.8%	20.0%	19.3%
	31-35	Count	56	202	258
		% within gender	16.8%	19.6%	18.9%
	36-40	Count	76	217	293
		% within gender	22.8%	21.0%	21.4%
	41-45	Count	63	174	237
		% within gender	18.9%	16.8%	17.3%
	46-50	Count	41	99	140
		% within gender	12.3%	9.6%	10.2%
	51-55	Count	27	58	85
		% within gender	8.1%	5.6%	6.2%
	>56	Count	2	3	5
		% within gender	.6%	.3%	.4%
Total		Count	333	1033	1366
		% within gender	100.0%	100.0%	100.0%

Table 1.0: Age distributions and gender breakdown

Table 2.0 shows the distribution by working experience and the states where they are presently teaching. The majority of the most experienced teachers with more than 26 years of teaching experience were concentrated in the state of Sarawak (22 teachers), followed by Kelantan (14 teachers) and Kedah (12 teachers). However, Pahang state has shown no teacher with 26 years of teaching experience and beyond. The aged teachers seemed to be the least (94 teachers) as compared to other working group experience.

The graduates or the newly appointed teachers (< 5 years) have shown the highest frequency (330) as compared to other working group experience. This shows that the teaching profession has increased its popularity tremendously. Teachers from Kedah state (51 teachers) outnumbered other states, followed by Johor (42 teachers), Pahang (42 teachers) and Perak (32 teachers). There has been a consistent distribution pattern among the teachers and states in terms of working experience of 6-20 years. However, there is an indication that Sabah does not show any wide distribution of any experienced working group of teachers (n = 31).

		Working Experience						Total
		<5	6-10	11-15	16-20	21-25	>26	
State	Johor	42	28	18	11	4	5	108
	Kedah	51	40	42	20	15	12	180
	Kelantan	18	21	44	37	32	14	166
	Melaka	17	13	10	3	2	2	47
	NS	25	25	15	8	6	5	84
	Pahang	32	39	25	21	6	0	123
	Perak	32	17	24	18	22	11	124
	Perlis	20	13	29	13	9	10	94
	Pulau Pinang	23	17	21	12	8	6	87
	Sabah	12	5	8	4	0	2	31
	Sarawak	23	14	17	24	11	22	111
	Selangor	18	21	13	10	4	1	67
	Terengganu	17	34	44	27	18	4	144
Total		330	287	310	208	137	94	1366

Table 2.0: Distributions of working experience and the states of the teachers presently teaching

Results

The questionnaire consists of two dimensions i) independent variables; personality and cognitive abilities (IT skills, co-curricular skills, assessment skills and subject knowledge); ii) dependent variables of teacher performance namely, classroom management, commitment, and responsibility. The selected variables have shown the means above the anchor point based on the 5-point Likert scale ranging from 3.01 (able to develop a simple personal Website using free provider like Yahoo, Blogspot etc.) to 4.23 (positive attitude toward teaching and the teaching profession). All the variables were normally distributed with the standard values of skewness and kurtosis at the acceptable values of less than 1.00. The standard deviations were highly distributed ranging from 0.708 to 1.156. The overall Cronbach's alpha (1960) has a reliability estimate of $\alpha = .95$ and this suggested the instrument has high consistency.

The hypothesized structural equation model of teacher effectiveness was estimated using Maximum likelihood estimation with AMOS. All the violations of parameter estimates were addressed (error variance higher than 1.0, loadings lower than 0.5 and critical ratio >1.96). The estimated model shows that teacher qualities predict teacher performance. The teacher qualities included personality and cognitive abilities while teacher performance has been assessed using classroom management skills and teachers' commitment and responsibilities.

It was found that the hypothesized model has shown an acceptable model fit (X^2= 1296.215 with df = 291, cmin/df = 4.450, RMSEA = 0.05, gfi = 0.928 and tli = 0.960) despite the *p* value which was less than .05. This was due to the sensitivity of chi-square values with the bigger sample size (Kline, 2001). However, the relationship between teacher personality and the commitment and responsibility variables was not significant. Thus, the model was further re-specified so as to obtain the model fitness as well as significant relationships. As a result, the re-specified model included in Figure 2.0 has shown an acceptable model. Table 4.0 reveals the high loadings of the parameters ($> \beta = 0.5$ standardized regression weight)

with critical ratio (CR > 1.96) indicating the variables selected were significant to the constructs (Bryne, 2001).

Specifically, the results in the re-specified model have revealed that IT skills construct was determined by the items namely; i.able to operate a computer comfortably, ii. able to scan virus using anti-virus software. iii. able to send and receive e-mail. iv. able to use Microsoft Excel software for data spreadsheet. v. able to use Power Point for presentation. Co-curriculum skills construct was measured by i. ability to adapt to various school co-curricular tasks, ii. ability to officiate in co-curricular competition / tournament. iii. ability to assist in managing co-curricular activities. iv. ability to organize co-curricular competitions. Assessment skills construct was measured by i. Skill in analyzing students' tabulation of grade to improve academic performance. ii. Skill in developing test questions based on students' true ability. iii. skill in developing marking scheme. iv. skill in developing test questions based on students' true ability. In understanding the personality construct, four items were detected namely; Understand personal relevance and meaning of education to individuals, commitment toward aims of national education, passion to help young individuals undergoing growth and lastly positive attitude toward teaching and the teaching profession. Classroom management skills construct has been detected to measure i. ability to plan according to the course syllabus ii. motivating students during teaching and learning iii. ability to enlighten the class for positive teaching and learning iv. practice of effective class communication. Commitment and responsibilities construct has been detected to be explained by the following items namely; i. commitment to assess students' work continuously; ii. responsibility to report students' progress as scheduled, iii. compliance to keeping students' progress report as stipulated, iv. ability to relate the importance of students' data/information in teacher's daily plan.

The overall re-specified model of teacher effectiveness has shown that both teacher qualities namely cognitive abilities (measured by IT- skills, assessment skills, and co-curricular skills) and teacher personality predict classroom management. Teachers need both cognitive abilities and personality to show performance in classroom management. However, teachers' personality alone could not enhance or predict their commitment and responsibilities in carrying out their duties.

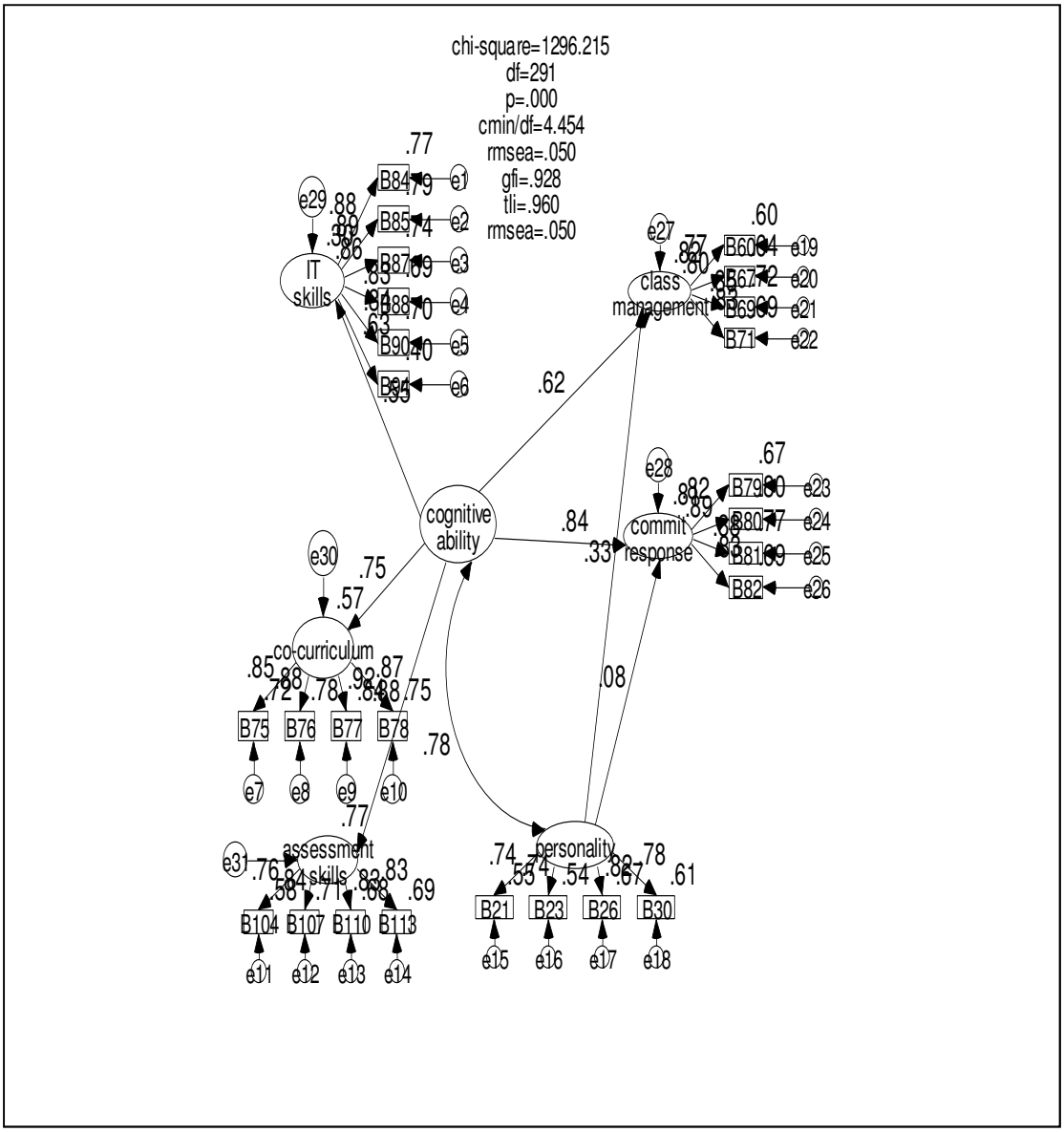

Figure 2.0: Hypothesized model.

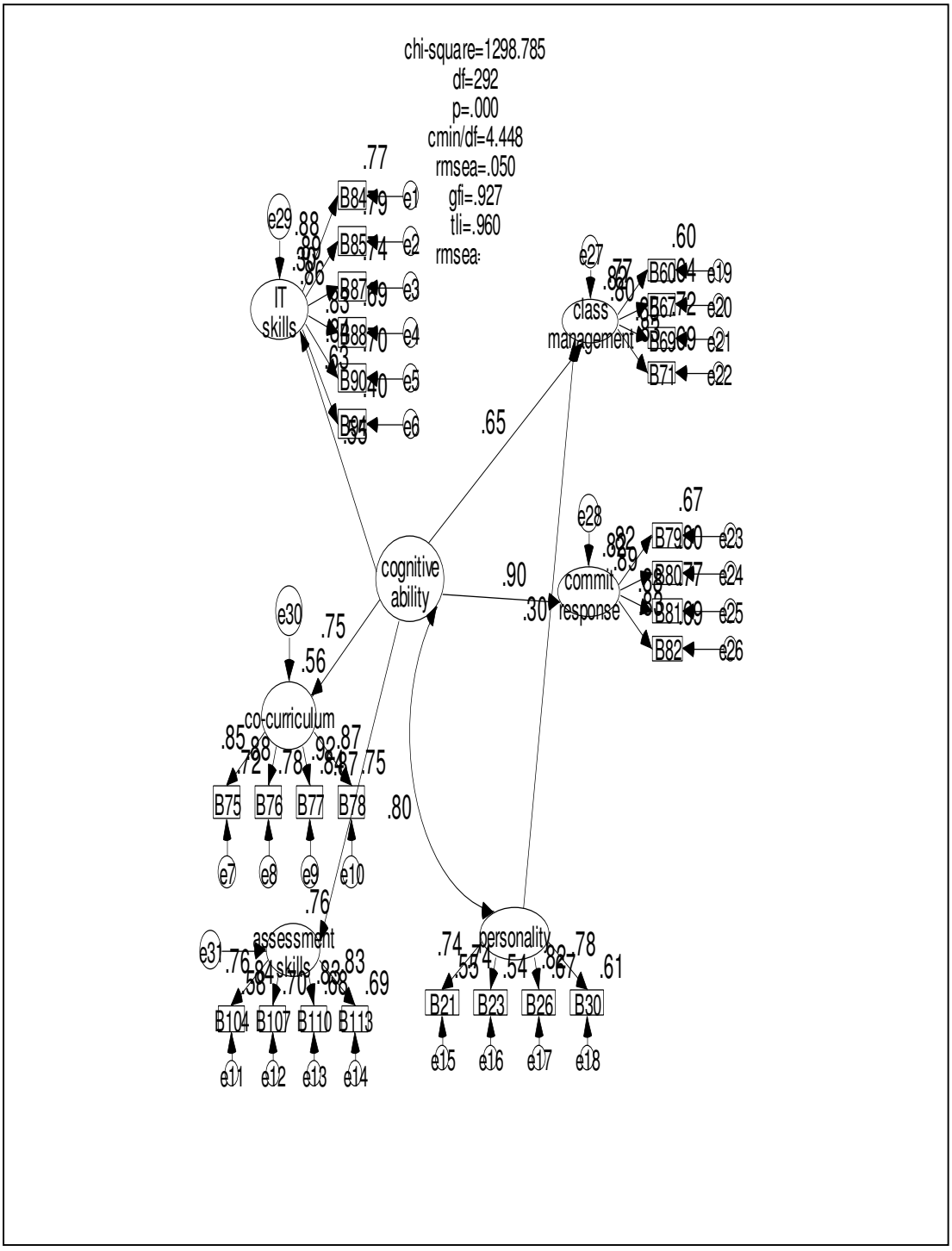

Figure 3.0: The re-specified model.

Parameter	**Std load**	**C.R**
IT_**skills <-- cognitive_ability**	.545	-
co-curriculum <--cognitive_ability	.750	17.52
assessment_skills <--cognitive_ability	.872	18.29
class_management <-- cognitive_ability	.647	13.06
commit_response <-- cognitive_ability	.904	18.48
class_management<-- personality	.302	7.961
Able to operate a computer comfortably(B84	.877	-
Able to scan virus using anti-virus software(B85)	.890	46.60
Able to send and receive e-mail(B87)	.860	43.53
Able to use Microsoft Excel software for data spreadsheet (B88)	.830	40.68
Able to create slide presentation using Microsoft Power Point(B90)	.836	41.20
Able to develop a simple personal Website (B94)	.629	26.31
Ability to adapt to various school co-curricular tasks(**B78)**	.869	-
Ability to assist in managing co-curricular activities(B77)	.916	48.11
Ability to officiate in co-curricular competition / tournament (B76)	.881	44.69
Ability to organize co-curricular competitions / tournaments (B75)	.847	41.51
Skill in analyzing students' tabulation of grade to improve academic performance (**B113)**	.832	-
Skill in developing test questions based on students' true ability (B110)	.827	35.88
Skill in developing marking scheme(B107)	.840	36.647
Skill in developing test questions based on students' true ability(B10)	.761	31.85
Understand personal relevance and meaning of education to individuals (B30)	.780	-
Commitment toward aims of national education(B26)	.819	31.21
Passion to help young individuals undergoing growth (B23)	.736	27.698
Positive attitude toward teaching and the teaching profession(B21)	.740	27.87
Ability to plan according to the course syllabus (**B60)**	.774	-
Motivating students during teaching and learning (B67)	.802	31.46
Ability to enlighten the class for positive teaching and learning (B69)	.850	33.735
Practice of effective class communication (B71)	.829	32.722
Commitment to assess students' work continuously (**B79)**	.821	-
Responsibility to report students' progress as scheduled (B80)	.894	40.710
Compliance to keeping students' progress report as stipulated (B81)	.876	39.466
Ability to relate the importance of students' data/information in teacher's daily plan (B82)	.829	36.273

Table 3.0: Standardized regression and critical ratio (C.R)

Note: The highlighted parameters were constrained to 1.0. All error variances were below 1.0.

Discussion and Conclusion

This study has empirically shown that teacher quality influences their performance in schools. Teacher quality was measured by teacher's cognitive ability (skills of assessment and evaluation, IT skills, and co-curricular knowledge) and the teacher's personality or interpersonal skills (soft skills). Teacher performance was measured by teacher classroom management, commitment, and responsibilities.

Teacher effectiveness has always been associated with student achievement (Goe, 2007; Rice, 2003). However, this study attempted to extend the model of teacher quality by

investigating the impact of teacher qualities and their performance in the classroom context of experienced teachers. The majority of the teachers involved in this study were those with more than 5 years of teaching experience. The results have confirmed that cognitive abilities among the experienced teachers can be measured via the teachers' skills in assessment, IT and co-curricular. Possession of these skills will influence the teachers' classroom management and performance (committed and responsible for their students). Douglas and Routledge (2007) defined these attributes as the ability to work and communicate with others.

On the other hand, teacher personalities were explained by their attitudes towards teaching and the teaching profession, passion to help young individuals undergo growth and development, commitment toward professional ethics and discipline, and understanding of personal relevance and meaning of education to individuals. These reflect the emotional stability and openness which fit into Goldberg's (1990) concept of personality. These positive attitudes or enthusiasm result in well organized classroom management skills (Waxman, 2003). However, enthusiasm alone cannot directly promote the teachers' commitment and responsibilities. Teacher personalities also need to be associated with their cognitive ability in order to render commitment and show responsibility to their students.

This study has implications for educational research on teachers' effectiveness. It has further extended the body of knowledge of teacher effectiveness whereby it can now be measured via their performance in classroom management and demonstrated commitment and responsibilities. Quality and effective teachers are not merely concerned about students' achievements but also their abilities to communicate and work with the students. Further, the teachers themselves can reveal and assess their own effectiveness.

Instrument validation in this research has shown the items to be highly reliable, indicating their suitability for use in future research on teacher quality and performance. Two components of teacher quality were identified by this study namely: cognitive abilities and personality. On the other hand, teacher's performance became the outcome of effectiveness where it was measured by teachers' commitment and responsibilities as well as classroom management.

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