

## THE DEVELOPMENT OF MORAL VIRTUES INDICATORS OF PHYSICAL EDUCATION TEACHER\*

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**Abstract:** The purpose of this research was to develop moral virtues indicators of physical education teachers by synthesizing moral virtues indicators of physical education teachers and testing the validities of the developed indicators. In testing for content validity, the indicators were screened and examined by ten physical education experts. A Confirmatory Factor Analysis with empirical data was utilized to test for construct validity. The sample of this research were 666 physical education teachers from all parts of Thailand derived from multi-level random sampling method. The research instrument was a self-assessment report on conduct of oneself according to the moral virtues indicators of physical education teachers. The basic data was analyzed by using descriptive statistics and reported as Means, S.D., C.V., Skewness, and Kurtosis. In addition, the Confirmatory Factor was analyzed by utilizing the LISREL 8.80 program. The results revealed that the moral virtues indicators of physical education teachers comprised of 10 components namely; Sportsmanship, Good Model, Responsibility, Honesty, Kindness, Justice, Sacrifice, Passion and Faith in the Profession, Gratefulness, and Discipline. The Confirmatory Factor Analysis found that the developed moral virtues indicators were fairly congruent with the compared empirical data as shown by a chi-square value of 4628.24, probability (p) of 0.000 level, degrees of freedom (df) of 1731, chi- relative Square ( $\chi^2/df$ ) of 2.67, Goodness of Fit Index (GFI) of 0.81, Adjusted Goodness of Fit Index (AGFI) of 0.80, Comparative Fit Index (CFI) of 0.99, Standardized Root Mean Squares Residual (SRMR) of 0.045, and Mean Squares Error of Approximation (RMSEA) of 0.050. The standardized loading values of all elements varied from 0.77 to 0.93. In conclusion, the ten moral virtues were appropriate moral virtues indicators for physical education teachers with validity in indication. Sportsmanship was the most significant moral virtues in indicating moral virtues of physical education teachers.

**Keywords:** Moral Virtues Indicators, Physical Education Teacher

### Introduction

Contemporary lifestyles of Thai people across all ages

and genders depend enormously on technology at every moment of their livings. Consequently, technology has changed ideas, imaginations, and behaviors of the people and influenced them to think differently and outside the past frames of mind. On the bright side, people have been challenged to invent new things which become innovations for future progress. However, there were negative impacts from technology, culture, lifestyles, values, and moral virtues of people in the society were all clearly affected. The negative impacts were visible ranging from the regression of moral behavior such as breach of code of conduct, abusive use of power by officials, corruptions, or the rampant incidents of violence in sporting events. Unfortunately, most of the mentioned incidents were deemed normal by the general public. Thus, acceptance virtues indicated the erosion of foundations in moral virtues which had been good bases for self-management of Thai people and society. These adverse behaviors and social norms if not properly corrected could transmit to the next generations.

Citizens are valuable resources of the society and outcomes of educational management of the country. In this regard, “teacher”, as a venerable person, plays an important role. Typically, teachers were well-respected and admired as scholars with moral virtues whose lives would be models for their students and the public to follow after. Teachers in the present era need to have stronger and versatile “teacher attributes” especially in the area of academic disciplines which must be modernized, diversified, and integrated. More importantly, teachers must have stronger attributes in moral virtues and strictly adhere to codes of conduct. Teaching profession is, then, the profession of the nation builders whose tasks contribute to the stability and sustainability of the country. Physical education is an integral component of the national education management that required people with expertise and competence or persons who graduated in physical education and were well trained. These people were responsible for operation because the physical education was both science and arts that could enhance people to be complete people. It was a process of educational management that not only focus on students to understand academic contents such as teaching in other subjects or allowing the students to play sport for exercising purpose, but the teacher also focus on learners to have a real practice and to engage physical education activities by themselves. In this regard, learning and expected behavior had occurred which its result was sustainable effectiveness according to the objective of physical education. The objectives of physical education included to build, maintain, and develop the learner to be physically strong with good moral. The learners will adapt

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themselves to support incoming situations with efficient lifestyle so that the routine lifestyle will be happily processed.

To educate a person to be perfect in physical, moral, emotional, and intellectual aspect, as well as, to be able to live in the society happily, were not a mission that everybody could pass or easily to complete. "Physical Education Teacher", who had knowledge in academics and understood in principle and philosophy of physical education, was clear about their mission of the profession with modern and innovative technology. The most important thing was teacher shall have moral values for not only being a teacher in the school, the physical education teacher shall also be responsible for activities enhancing sport-related curriculum, including sport competition in the school, sport competition among schools, and physical education activities for special students who had more or less competency than other ordinary students. Moreover, the physical education teacher had to be responsible for enhancing and processing in the profession of physical education and sport teacher (Worasak Pienchop, 2005). This would be a benefit for students and everybody in the school, including nearby communities. Additionally, the development according to the ideal of physical education and sports had been obtained. The completed physical education teacher, which was so-called the ideal physical education teacher, shall have high capability in teaching and working in every aspect; have good characteristics, good model; and have moral. However, the problem on image of physical education teacher in the past was the weakness in virtues and being venerable person and regression of teaching efficiency of the physical education teacher which was unsatisfactory. The attitude and faithfulness towards the profession was in low level (Ratchanee Kwanboonchan, 1993). Although in the past decades, there were many institutions of education producing physical education teachers to the society. The institutions aimed to create qualified pundits to labor market. The problem found from moral behavior of physical education teachers or persons in physical education in Thai society still appeared in every period of time. Meanwhile, the form of problems or regression was changed by the context of the society. In this research, there were researchers supporting the unwanted capability of physical education teachers. There was no any research seriously or clearly focusing on moral virtues that should be in physical education teachers.

Therefore, to study the moral virtues in the profession of physical education teachers was an important issue that should be developed concretely and be accepted in the profession. This could support the government policy that has focused on the enhancement on development of moral virtues and intentionally processed under the provision of Section 77 of the Constitution of the Kingdom of Thailand, B.E.2540 (1997), stating that the government shall provide the moral virtues standard of officials and officers or other employees of

the government in order to prevent any corruption, dishonest behavior, and enhance the efficiency in performing their duty, including to reform the bureaucracy. The intention of this Constitution clearly pointed out that it required establishing the standard of special behavior of each profession (Nongluck Wiratchai, 2008). This research aimed to develop the moral virtues indicators of physical education teachers. The research result would be greatly benefit to the status of physical education teachers and the institutions producing the physical education teachers and organizations that developed persons in physical education could apply in planning for developing the curriculum of producing wanted or ideal physical education teachers who was expert and good into the education system. Additionally, the training curriculum was developed and key persons in physical education of the country could be produced efficiently. It could be benefit for assessment of personnel qualification or personnel selection, and could inspire the idea for physical education teachers, including relevant government agencies and divisions to consider providing the standard of moral values of Thai physical education teachers. Finally, the standard for the profession of Thai physical education teachers would further be announced.

### Conceptual Framework

As for the conceptual framework of this research, the research studied from documentation, texts, researches, and analyzed the content on moral virtues in the profession of teachers and physical education teachers, issues relating to policy enhancing moral virtues of government sector, theory on virtue behavior, method of indicator development, analyzed statistics, and data from in-depth interview with experts in physical education field and other relevant fields. The study result was synthesized into the conceptual framework as follow:

(See Figure 1 on the next page)

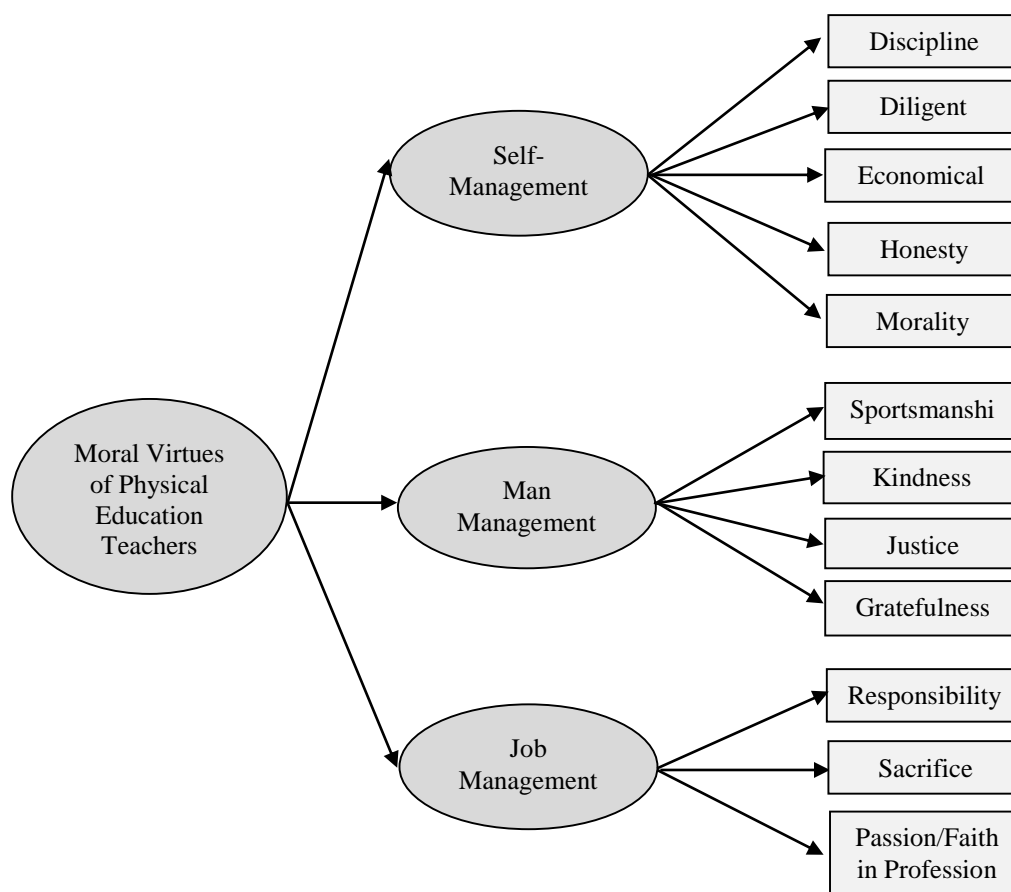
### Methodology

#### Procedure

The purpose of this research was to develop moral virtues indicators of physical education teachers. This research was to study abstract things and change them to concrete things which became the indicators that were measurable, observable, and acceptable under the statistical analysis result. The research methodology can be summarized as follow:

**Step 1** – To study the conceptual framework of the research by studying from relevant documents, texts, researches, theories, including empirical data from the opinion of 5 experts conducted the in-depth interview. Those data were analyzed in order to find out the moral value supposed to have in their life and operational practice.

**Step 2** – To develop the model of hypothesis on the elements of moral values of physical education teachers by synthesizing the moral values and data from Step 1 in



**Figure 1: Conceptual Framework of Research**

order to create the definition of moral values of physical education teachers, to build the relation of the components of moral values of physical education teachers through consideration, screening, and testing the content validity by conducting focus group discussion. 10 physical education experts determined the weight of importance score and screened the moral values which were indicators. The model of hypothesis was summarized. There were 10 components in the structure of moral virtues elements of physical education teachers. There were totally 61 observed variables indicated in each component.

**Step 3** – To test the construct validity of the model of hypothesis in this research was to conduct the Confirmatory Factor Analysis by utilizing the LISREL 8.80 program in order to assess the congruence with the empirical data. (The researcher had created the tool for data collection on conduct of oneself according to the moral virtues of physical education teachers throughout the country.) The index from the analysis report of the program confirmed that how moral virtues and observed variables were indicated the moral virtues of physical education teacher.

**Step 4** – Conclusion - Discussions and Preparation of Research/Thesis

#### *Participants*

According to the research process, it determined two groups of populations. The first group was experts selected from the experts with doctor's degree or master degree or equivalent in the physical education or relevant majorities or academics in moral virtues. In addition, at least 15 experts, accepted by the society and general people on their achievement of self-management, man management, and job management, had developed the indicators and create the model of hypothesis of the moral virtues elements of physical education teachers. The second group was 666 physical education teachers from all parts of Thailand derived from multi-level random sampling method in order to obtain the observed data on conduct of oneself according to the moral virtues of physical education teachers. Such data were utilized with the model of hypothesis and the elements were analyzed by the Confirmatory Factor Analysis with the LISREL 8.80 program.

In addition, the size of the sampled group in this research was determined at 700 samples by using the suggestion of Linderman, Merenda & Gold (1980) determining 10 people in a sample group per 1 observed variable.

### *Instrumentation*

Tools used in this research was the self- assessment form on behavior according to the moral virtues indicators of physical education teachers created from the data of moral virtues elements of physical education teachers. The question can be divided into 2 parts: Part 1 (Questions 1 – 7) for general information with, and Part 2 (Questions 1- 61) for behavior assessment according to the moral virtues indicators of physical education teachers with 5 levels of assessment. The tools of this research was tested its content validity with IOC from 5 experts. The result of IOC was between 0.60 – 1.00 The validity of the tools was tested by conducting try-out with 50 physical education teachers who were not in the sampled group of this research. All validity coefficients were 0.963 and the validity coefficient by each element was from 0.732 to 0.896 which was in high level and appropriate to further apply.

### **Results of the Study**

The research result was presented by categorizing into two parts as follow:

#### Part 1 – Study Result on General Information of Sampled Group

According to the empirical data collected from total 666 sampled people, the data was the sampled group and to analyze basic statistics of indicators in the model of the structure of moral virtues elements of physical education teachers. It found that the data from sampled population in this research was collected from 666 physical education teachers which were targeted at 700 teachers, which was equal to 95.14%. In this amount, there were 74.62% of men, while 53.75% of the sampled group aged between 51-60 years old. 69.97% graduated in the bachelor degree, 26.58% in the master degree, and 2.25% in doctor's degree. Most of physical education teachers had experienced in teaching physical education for 31-40 years. They were responsible for more than 4 assignments such as teaching, controlling sport activities and competition, consulting teacher, and administrative work.

The basic statistics of indicators consisted of 61 observed variables which were used for the Confirmatory Factor Analysis. From the empirical data, it found that means and standard deviation of each indicator in average were from 4.28 to 4.86. The highest averaged indicator at 4.86 was to pay respect to parents, teachers, and benefactors, while the lowest averaged indicator at 4.28 was to work and get good result. The sampled group showed their behavior according to indicators at the high level. There were 13 indicators that the behavior of target group was in high level with the average lower than 4.50, ordered by the lowest to the highest, including 1) work and get good result, 2) self-control in every situation, 3) Live modestly, 4) avoid all vices, 5) sacrifice own happiness for others, 6) plan to work and follow the plan, 7) be eager and enthusiastic for effectiveness of work, 8) encounter the situations with prudence, 9) use moral

reasons in problem solving, 10) strictly comply with every rule and regulation, 11) recognize property values and use it for utmost benefit, 12) maintain public benefit more than own benefit, and 13) have Dharma in mind when spending daily life. Therefore, it considered whether physical education teachers should enhance their behavior according to these 13 indicators or not.

Moreover, as for the coefficient of variation of the indicators, it showed that indicator with the highest coefficient of variation at 0.17 was to avoid all vices, while the indicator with the lowest coefficient of variation at 0.07 was to pay respect to parents, teachers, and benefactor. When considering the skewness of indicators, it found the distribution of negative skewness and most of them was lower than 2.00, except the indicator relating to loyalty to profession/ organization/ institution, to pay respect to parents, teachers, and benefactors, and to be proud in the duty of physical education teachers. The skewness was at -2.2, -2.52 and -2.25, respectively. This showed that most of sampled group performed themselves in the above indicators in the same way. Most of Kurtosis was positive and lower than 7.00. This showed that statistically basic data of indicators were distributed slightly different from normal curve. The data can be further analyzed by utilizing the LISREL.

#### Part 2- Validity Analysis with the Confirmatory Factor Analysis

The result on structural validity analysis with the LISREL 8.80 program testing the validity of the model showed that every sub-element and observed variable could indicate the moral virtues of physical education teachers. The result showed as follow:

(See Table 1 and 2 on the last page)

From Table 1, the result of the Confirmatory Factor Analysis under the hypothesis model of moral virtues elements of physical education teachers, compared to the empirical data, showed a chi-square value of 4628.24, probability (p) of 0.000 level, degrees of freedom (df) of 1731, chi- relative Square ( $\chi^2/df$ ) of 2.67, Goodness of Fit Index (GFI) of 0.81, Adjusted Goodness of Fit Index (AGFI) of 0.80, Comparative Fit Index(CFI) of 0.99, Standardized Root Mean Squares Residual (SRMR) of 0.045, and Mean Squares Error of Approximation (RMSEA) of 0.050. When compared to the criteria of index frequently used for considering the congruence of the model with the empirical data (Supamas Angsuchote, 2011), it showed that the research model was congruent with the empirical data at moderate level. The moral virtues elements of physical education teachers comprised of 10 components which consisted of 61 indicators that were observed variables. The standardized loading values of every indicator were positive with its size from 0.58-0.82. The statistical significance of every component was at .01. Every indicator had validity in moral virtues indication. The indicators of c1-c5 indicated 'Discipline'

with the standardized loading values varied from 0.64-0.76. The indicators of r1-r7 indicated 'Responsibility' with the standardized loading values varied from 0.58-0.76. The indicators of h1-h5 indicated 'Honesty' with the standardized loading values varied from 0.65-0.73. The indicators of j1-j5 indicated 'Justice' with the standardized loading values varied from 0.73-0.82. The indicators of k1-k5 indicated 'Kindness' with the standardized loading values varied from 0.65-0.73. The indicators of s1-s7 indicated 'Sportsmanship' with the standardized loading values varied from 0.64-0.76. The indicators of sa1-sa4 indicated 'Sacrifice' with the standardized loading values varied from 0.66-0.80. The indicators of g1-g6 indicated 'Gratefulness' with the standardized loading values varied from 0.60-0.81. The indicators of l1-l6 indicated 'passion and faith in the profession' with the standardized loading values varied from 0.60-0.74. The indicators of i1-i11 indicated 'Good model' with the standardized loading values varied from 0.60-0.76.

From Table 2, the moral virtues elements of physical education teachers consisted of 10 moral virtues components with the standardized loading values from 0.77 to 0.93. The statistical significance of every component was at .01. Every indicator had validity in moral virtues indication. The standard error was varied from 0.05-0.06, ordered by the standardized loading value with descending sort which were 0.93 for sportsmanship, 0.90 for good model, 0.88 for honesty and kindness, 0.86 for justice, sacrifice, and passion and faith in the profession, 0.80 for gratefulness, and 0.77 for discipline. Each component had different Coefficient of Determination ( $R^2$ ) showing variation and moral virtues elements of physical education teachers at 87%, 81%, 78%, 78%, 77%, 74%, 73%, 73%, 65%, and 59%, respectively. These results were congruent with the standardized loading values and could indicate the different validity of measurement or moral virtues of physical education teachers.

### Conclusion

The research result was summarized that there were 10 components of moral virtues of physical education teachers which could be measured and observed by totaling 61 indicators with the validity in indication. The statistics resulting from the Confirmatory Factor Analysis with LISREL program could be organized by the importance of each indicator and by its standardized loading values, and coefficient of determination with descending sort. It could be summarized as follow:

#### 1<sup>st</sup> Component: Sportsmanship

There were 7 indicators expressing the behavior on sportsmanship, which were to encourage oneself and others, not to be discouraged by obstacles, to adhere to harmony, to encounter the situations with prudence, to have self-control in every situation, to pay respect to own and other's role and duty, and to have good spirit.

#### 2<sup>nd</sup> Component: Good Model

There were 11 indicators expressing the behavior on good model, which were to behave properly, to have good interpersonal skill, to be brave to do good deeds, to have good personality, to consider cost-effectiveness, to have Dharma in mind when spending daily life, to solve problem with moral reasoning, to be healthy, to live modestly, and to avoid all vices.

3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> Components: which their standardized loading values were equal as follow:

Responsibility – There were 7 indicators expressing the behavior on responsibility, which were to carry out all duties under one's responsibility, to be a good member of organization/ society/ nation, to accept consequence of one's and team's actions, not to abandon team when facing any obstacles, to be a good family member, to be eager and enthusiastic for effectiveness of work, and to be punctual.

Honesty – There were 5 indicators expressing the behavior on honesty, which were to do not refer stealthily or distort information, not to perform any action for bribery, to have loyalty to one's profession/ organization/ institution, to adhere to uprightness and justices, and to keep own words.

Kindness – There were 5 indicators expressing the behavior on kindness, which were to have sympathy for others, to be friendly with everybody, to be polite and gentle to everybody, to help others with willingness, and to support students to succeed and grow.

6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> Components: which their standardized loading values were equal as follow:

Justice - There were 5 indicators expressing the behavior on justice, which were to provide the problem solution with fairness, to adhere to justice and fairness, to protect one's right, to respect human rights, and to treat everybody equally.

Sacrifice - There were 4 indicators expressing the behavior on sacrifice, which were to contribute to society, common interest comes before personal interest, to sacrifice own happiness for others, and to help others with willingness.

Passion and Faith in the Profession - There were 6 indicators expressing the behavior on passion and faith in the profession, which were to be proud to be a member of the organization, to be a competent physical education teacher, not to ignore dishonor on one's profession, to develop oneself and seek knowledge, to be proud to be a physical education teacher, and to participate in professional development activities.

#### 9<sup>th</sup> Component: Gratefulness

There were 6 indicators expressing the behavior on gratefulness, which were to protect the honor of one's organization, to protect the honor of benefactors, not to bring disgrace on benefactors, to help and support

benefactors, to return the favor when possible, and to pay respect to parents, teachers, and benefactors.

#### 10<sup>th</sup> Component: Discipline

There were 5 indicators expressing the behavior on discipline, which were to strictly comply with every rule and regulation, to be consistently discipline, to plan to work and follow the plan, to dress neatly and appropriately, and to work and get good result.

### Discussion

From the research, the researcher focused on and studied from abstract things, which were moral virtues in the profession of physical education teachers. In addition, the researcher aimed to develop the abstract things to be concrete and observable, measurable, and acceptable in order the academics and people in this profession, or interested person to apply the research result to be widely beneficial. The research result was in accordance with the hypothesis model created from abstract and the result was concrete. There were 10 moral virtues of Thai physical education teachers, covering moral virtues in the profession that the physical education teachers should be complied. Every moral virtues had been tested the validity in indication, including content validity by experts in physical education and relevant fields, and structural validity from statistical analysis with advanced LISREL program. When those moral virtues were ordered by their standardized loading values and coefficient of determination, the order of importance of moral virtues that showed the outstanding identity of the profession of physical education teachers was clearly an indicator, which its advantage was different from other professions. The research result can be summarized that among 10 moral virtues, "Sportsmanship" was an important moral virtue which could best measure the moral virtues of physical education teachers. It indicated that physical education teachers were clearly different from other profession teachers. Worasak Pienchop (1980) stated that sportsmanship was an important and necessary moral virtue which can help people to live in the society peacefully. It was an important duty for physical education teachers to teach the learners. It was in line with Sanborn and others (1987) who had recorded in *Issues Dealing with Sportsmanship* (p.84-98), stating that the sportsmanship was an virtue of sport and it was applied religion. A person with sportsmanship should have moral virtues and it was a duty of physical education teachers to cultivate the sportsmanship through classroom activities. Therefore, the sportsmanship was a basic and important characteristic that was necessary for every physical education teacher to have.

The second moral virtue of physical education teachers was "Good Model". To be a good model was one of nine codes of conducts of teachers (Secretariat Office of The Teacher's Council of Thailand, 2005). The physical education teacher was a personnel environment influenced on students and was a model of self-behavior

more than teachers in other fields. The nature of physical education teachers included self-confidence, being extrovert, skillfulness in sports, good personality, look, health, and being cheerful. Moreover, they had respect and were friendly that could get along with everybody. This was a characteristic that was consistent with the summary of characteristics and capability of physical education teachers in the research of Ratchanee Kwanboonchan (1993). These characteristics had impressed and attracted people. The definition of good model in this research was mixed with the sufficiency and having Dharma in mind when spending daily life and the characteristics of good people can be measured and observed. This also covered the characteristic of smart and good people supposed to be in the present society. Therefore, it was an important indicator with appropriate validity for measuring moral virtues of physical education teachers.

The 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> components of moral virtues had equal standardized loading values which were Responsibility, Honesty, and Kindness. The 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> components also had equal standardized loading values which included Justice, Sacrifice, and Passion and Faith in the Profession. All 6 moral virtues was a basic moral virtue indicating good people. These moral virtues had appeared in several research results. The consistency was in the research conducting the Confirmatory Factor Analysis on moral virtues of teachers by Atchara Praivetch (2006). Her research result summarized that there were 11 elements of teacher moral, ordered by the weight of elements in descending sort. Those 11 elements included harmony, gratefulness, discipline, economizing, justice, kindness, responsibility, honesty, sacrifice, passion and faith in the profession, and patience. Therefore, to be a good and successful physical education teacher in the profession, it was necessary to have those 6 basic moral virtues.

The 9<sup>th</sup> component was "Gratefulness" and the 10<sup>th</sup> component was "Discipline". All indicators were important to measurement of good people in the profession of physical education teachers. This was in line with the research result of Nongluck Viratchai and others (2005) that surveyed and synthesized the moral virtues indicators of Thai people. It found that there should be 14 indicators and the importance of moral virtues indicators should be ordered in descending sort. Those 14 indicators included 1) Honesty, 2) Responsibility, 3) Conscience, 4) Diligence, 5) Discipline, 6) Patience, 7) Effectiveness Focus, 8) Justice, 9) True friend, 10) Harmony, 11) Gratefulness, 12) Satisfaction, 13) Economizing, and 14) Independence. There were 5 indicators that needed to be closely watched for Thai society which were 1) Honesty, 2) Responsibility, 3) Conscience, 4) Diligence, and 5) Discipline.

In sum, the result of synthesis of moral virtues indicators of physical education teachers according to this research process could properly form a set of moral virtues indicators of Thai physical education teachers

which could be useful for academic and profession.

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**Table 1: Result of the Confirmatory Factor Analysis on Moral Values of Physical Education Teachers from 61 Observed Variables**

Elements/Indicators (Observed Variables)	Standardized Loading Values	t	SE	R <sup>2</sup>
Discipline				
Strictly comply with every rule and regulation (c1)	0.74	-	-	0.54
Dress neatly and properly (c2)	0.64	15.53**	0.02	0.40
Plan to work and follow the plan (c3)	0.69	16.85**	0.02	0.48
Work and get good result (c4)	0.68	16.57**	0.03	0.46
Be consistently discipline (c5)	0.76	18.54**	0.02	0.58
Responsibility				
Be punctual (r1)	0.58	-	-	0.34
Be eager and enthusiastic for effectiveness of work (r2)	0.67	13.65**	0.03	0.44
Accept consequence of one's and team's actions (r3)	0.67	13.66**	0.03	0.44
Carry out all duties under one's responsibility (r4)	0.72	14.34**	0.03	0.51
Do not abandon team when facing any obstacles (r5)	0.68	13.91**	0.03	0.47
Be a good family member (r6)	0.68	13.85**	0.03	0.47
Be a good member of organization/ society/ nation (r7)	0.75	14.71**	0.03	0.56
Honesty				
Adhere to uprightness and justices (h1)	0.70	-	-	0.49
Keep own words (h2)	0.70	19.46**	0.02	0.49
Do not refer stealthily or distort information (h3)	0.70	16.27**	0.02	0.48
Do not give/accept bribes (h4)	0.73	17.14**	0.02	0.54
Have loyalty to one's profession/ organization/ institution (h5)	0.65	15.29**	0.02	0.42
Elements/Indicators (Observed Variables)	Standardized Loading Values	t	SE	R <sup>2</sup>
Justice				
Respect human rights (J1)	0.73	-	-	0.53
Provide the problem solution with fairness (J2)	0.81	20.46**	0.02	0.65
Adhere to justice and fairness (J3)	0.82	20.76**	0.02	0.67
Protect one's right (J4)	0.79	19.84**	0.02	0.62
Treat everybody (J5)	0.75	18.75**	0.02	0.56
Kindness				
Help others with willingness (k1)	0.73	-	-	0.53
Support students to succeed and grow (k2)	0.67	16.37**	0.02	0.45
Have sympathy for others (k3)	0.77	18.67**	0.02	0.59
Be friendly with everybody (k4)	0.70	16.93**	0.02	0.49
Be polite and gentle to everybody (k5)	0.65	15.83**	0.02	0.43

**Table 1: Result of the Confirmatory Factor Analysis on Moral Values of Physical Education Teachers from 61 Observed Variables**

Elements/Indicators (Observed Variables)	Standardized Loading Values	t	SE	R <sup>2</sup>
<b>Sportsmanship</b>				
Pay respect to own and other's role and duty (s1)	0.69	-	-	0.47
Have good spirit (s2)	0.65	18.09**	0.02	0.42
Encounter the situations with prudence (s3)	0.66	15.57**	0.03	0.44
Encourage oneself and others (s4)	0.72	17.00**	0.02	0.52
Adhere to harmony (s5)	0.76	17.78**	0.02	0.58
Not to be discouraged by obstacles (s6)	0.72	16.87**	0.02	0.51
Have self-control in every situation (s7)	0.64	15.22**	0.03	0.41
<b>Sacrifice</b>				
Sacrifice own happiness for others (sa1)	0.66	-	-	0.44
Contribute to society (sa2)	0.79	20.26**	0.02	0.63
Common interest comes before personal interest (sa3)	0.80	17.02**	0.03	0.64
Help others with willingness (sa4)	0.75	16.21**	0.03	0.56
Elements/Indicators (Observed Variables)	Standardized Loading Values	t	SE	R <sup>2</sup>
<b>Gratefulness</b>				
Pay respect to parents, teachers, and benefactors (g1)	0.60	-	-	0.36
Help and support benefactors (g2)	0.75	16.82**	0.02	0.57
Protect the honor of benefactors (g3)	0.80	15.72**	0.02	0.64
Protect the honor of one's organization (g4)	0.81	15.77**	0.03	0.65
Return the favor when possible (g5)	0.71	14.49**	0.02	0.50
Do not bring disgrace on benefactors (g6)	0.74	14.94**	0.02	0.55
<b>Passion and Faith in the Profession</b>				
Do not ignore dishonor on one's profession (11)	0.74	-	-	0.55
Be a competent physical education teacher (12)	0.70	17.18**	0.02	0.48
Be proud to be a physical education teacher (13)	0.66	16.28**	0.02	0.43
Develop oneself and seek knowledge (14)	0.60	14.71**	0.02	0.36
Participate in professional development activities (15)	0.65	16.09**	0.02	0.43
Be proud to be a member of the organization (16)	0.74	18.40**	0.02	0.55
<b>Good Model</b>				
Have Dharma in mind when spending daily life (i1)	0.66	-	-	0.44
Avoid all vices (i2)	0.60	15.83**	0.03	0.36
Be healthy (i3)	0.63	14.76**	0.03	0.40
Have respect (i4)	0.74	17.06**	0.02	0.55
Have good personality (i5)	0.70	16.02**	0.02	0.48
Elements/Indicators (Observed Variables)	Standardized Loading Values	t	SE	R <sup>2</sup>
Behave properly (i6)	0.76	17.22**	0.03	0.57
Brave to do good deeds (i7)	0.73	16.79**	0.02	0.54
Have good interpersonal skills (i8)	0.76	17.28**	0.03	0.58
Solve problems with moral reasoning (i9)	0.68	15.82**	0.02	0.47
Live modestly (i10)	0.61	14.24**	0.03	0.37
Consider cost-effectiveness (i11)	0.66	15.40**	0.03	0.44

\*\* $p < .01$



**Table 2: Result of the Confirmatory Factor Analysis on Moral Virtues of Physical Education Teacher from Components**

<b>Elements/Indicators (Observed Variables)</b>	<b>Standardized Loading Values</b>	<b>t</b>	<b>SE</b>	<b>R<sup>2</sup></b>
Discipline	0.77**	16.55**	.05	0.59
Responsibility	0.88**	14.86**	.06	0.78
Honesty	0.88**	17.93**	.05	0.78
Justice	0.86**	18.70**	.05	0.74
Kindness	0.88**	18.57**	.05	0.77
Sportsmanship	0.93**	18.46**	.05	0.87
Sacrifice	0.86**	16.28**	.05	0.73
Gratefulness	0.80**	14.47**	.06	0.65
Passion and faith in the profession	0.86**	18.58**	.05	0.73
Good Model	0.90**	17.40**	.05	0.81

\*\* $p < .01$