

Indicators of Authentic Leadership for Teachers in the General Education Session of Buddhist Scripture Schools

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Abstract

This research aims to test the fitness of theoretical model of authentic leadership with the empirical data, and investigate the factor loading. The descriptive research methodology was conducted. The data were collected from the 660 samples who are the teachers in the General Education Session of the Buddhist Scripture Schools in Thailand. The data was analyzed using a computer program. The results of the research confirmed the hypotheses of the research which are: the theoretical model is relevant to the empirical data, and the value of Relative Chi-Square (CMIN/DF), Root Mean Square Error of Approximation (RMSEA), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI), and (6) Normed Fit Index (NFI) is in accordance with the criteria and 2) the lowest value of factor loading of the major factors is 0.94 which is 0.70 higher than the criteria, the Lowest value of factor loading of the minor factors is 0.58, and the lowest value of the factor loading of the indicators is 0.31 which is 0.30 higher than the criteria. It shows that the theoretical models of Authentic Leadership represents the relationship of the four major factors, 12 minor factors and 71 indicators which can be used for guiding the development of teachers in the General Education Session of the Buddhist Scripture Schools, in construct validity way which has supported by the results of this study.

Key words: Indicator, Authentic Leadership, Buddhist Scripture Schools

1. Introduction

1.1 Introduce the Problem

“A quality education begins with the best teachers” (Pyne, 2014) is the quotation that reflects the importance of teacher quality which influences the education quality. There are many factors for supporting the teacher quality, but the leadership is one of the major factors as Othman (2011) points out that the administrator who is responsible for policies and focuses on “do the right things” and the manager who is responsible for operation and focuses on “do the thing right” need the leadership for enhancement in the case of “hand in hand” with the concept that “Everyone is a leader”, “Everyone can be a leader” or “Everyone have to be a leader”. This concept concerns with constructing the leadership for all organizations, not only the administration section. The concept such as that stated by York-Barr and Duke (2004) has shown that the teacher leadership is relevant to the teacher action which affects the learning culture and acting. Teachers are the change agents in the classroom, in the school, or in the education area.

There are many styles of the leadership, such as creative leadership, strategic leadership, transformational leadership, transactional leadership, thought leadership, spiritual leadership, ethical leadership, synergistic leadership, mindful leadership, innovative leadership, inspirational leadership, resourceful leadership, educational leadership, instructional leadership, teacher leadership, and authentic leadership (Sanrattana, 2014). Regarding many styles of leadership, the researchers emphasize on the authentic leadership with its importance as Lavin (2016) Business Psychologist-Impact Consulting Psychologist says “Research has shown us that authentic leaders create more trust with their employees. Authentic leadership has also been linked with increased creativity, an ever important need for businesses in today’s fast paced, complex and ambiguous world, where constant change and innovation are

required to get ahead of the competition.” On the other hand, the meaning of authenticity is unclear like Bruyckere, Kirschner, and Huang (2016) has argued in their research titled *Authentic Teachers: Student Criteria Perceiving Authenticity of Teachers* as the extract *“The concept of authenticity has been discussed for decades, but what it actually means to be authentic as a teacher seldom progresses past the realm of philosophy”* and *“Authenticity is seen by many as a key for good learning and education. There is talk of authentic instruction, authentic learning, authentic problems, authentic assessment, authentic tools and authentic teachers. The problem is that while authenticity is an often-used adjective describing almost all aspects of teaching and learning, the concept itself is not very well researched.”*

In addition, the Buddhist scripture schools of the general education session (the schools which are founded for educating and training the male youths ordained in Buddhism by using the teaching of the Lord Buddha as the main curriculum so that the learners can learn morality, virtue, and ethics as Thailand is the city of Buddhism) have encountered the problems concerned with the continuously unimproved teachers. As a result, the operation is not effective as it should. The Office for National Education standards and Quality Assessment (Public Organization) has proposed, after having assessed, that the teachers must be improved in terms of the proficiency of the teaching and learning management and the extra-curricular activity to encourage the learners to gain the thinking skills and the knowledge seeking skills, including the teacher development for authentic learning assessment, the production and application of technology for teaching all the subjects (Ratchamunee, 2012)

1.2 Importance of the Problem

Consequently, the aim of this research is to construct the theoretical model which indicates the structural relationship of the major factors, the minor factors, and the indicator of authentic leadership. The results are expected to apply as the paths of teacher development in the Buddhist scripture schools of the general education session. In this research, the researchers had studied the variety of theories and research in order to gain the outcome of the theoretical model for authentic leadership. The theoretical model, after that, was examined in terms of the fitness and the empirical data derived from the samples who are the teachers in the Buddhist scripture schools. If the theoretical model is in accord with the empirical data abided by, it implies that the theoretical model can be used as the paths to develop effectively the authentic leadership for the teachers in the Buddhist scripture schools of the general education session. This will help the teachers be aware of the authentic leadership which will reduce the teachers’ lack of quality. Moreover, the National Office of Buddhism and other institutes, such as the Basic Education Institute, the Educational Service Area Office, the Office of the Basic Education Commission or other relevant departments can apply the theoretical model of this research as the path in order to develop the personnel in their own organization. Likewise, Wiratchai (2002) claims the benefit of the theoretical model as in the extract *“the tested model will be qualified for the capability of data reduction, the simplicity of application, the reduction of duplicate data. This is the concise data management and can be applied for paying attention, reviewing and making decision for the organization operation. Besides the tested model is qualified for applying all levels of organization either a national organization or subdivision.”*

In this research, the researchers have investigated the major factors of the authentic leadership. From having studied several theories and 16 research papers, it is found that the major factors consist of 38 theoretical frameworks, but when being selected from the high frequency up to 5, it is asserted that there are only four major factors matched with this research, namely Self-Awareness (SA), Establishing Connected Relationships (ER), Practicing Your Values (PV), and Leading With Heart (LH).

After that, the researchers have investigated the minor factors of each major factor. It is found that; 1) Self-Awareness (SA) consists of three minor factors, namely Emotional Awareness (SAE), Accurate Self-Assessment (SAA), and Self-Consciousness In Development (SAC) 2) Establishing Connected Relationships (ER) consists of three minor factors, namely Participation (ERP), Trust (ERT), and Shared Vision (ERS) 3) Practicing Your Values (PV) consists of three minor factors, namely Beliefs (PVB), Propagation Experience (PVE), and Perception (PVP) 4) Leading With Heart (LH) consists of three minor factors, namely Be Leader (LHL), Learning Person (LHP), and Recognized (LHR) (each minor factor is symbolized for illustration).

Regarding the data studied, the researchers have gained the theoretical model of the Authentic Leadership (AL) in order for the research employment which shows the structural relationship between the four major factors and 12 minor factors in terms of the measurement model as shown in the Figure 1 below.

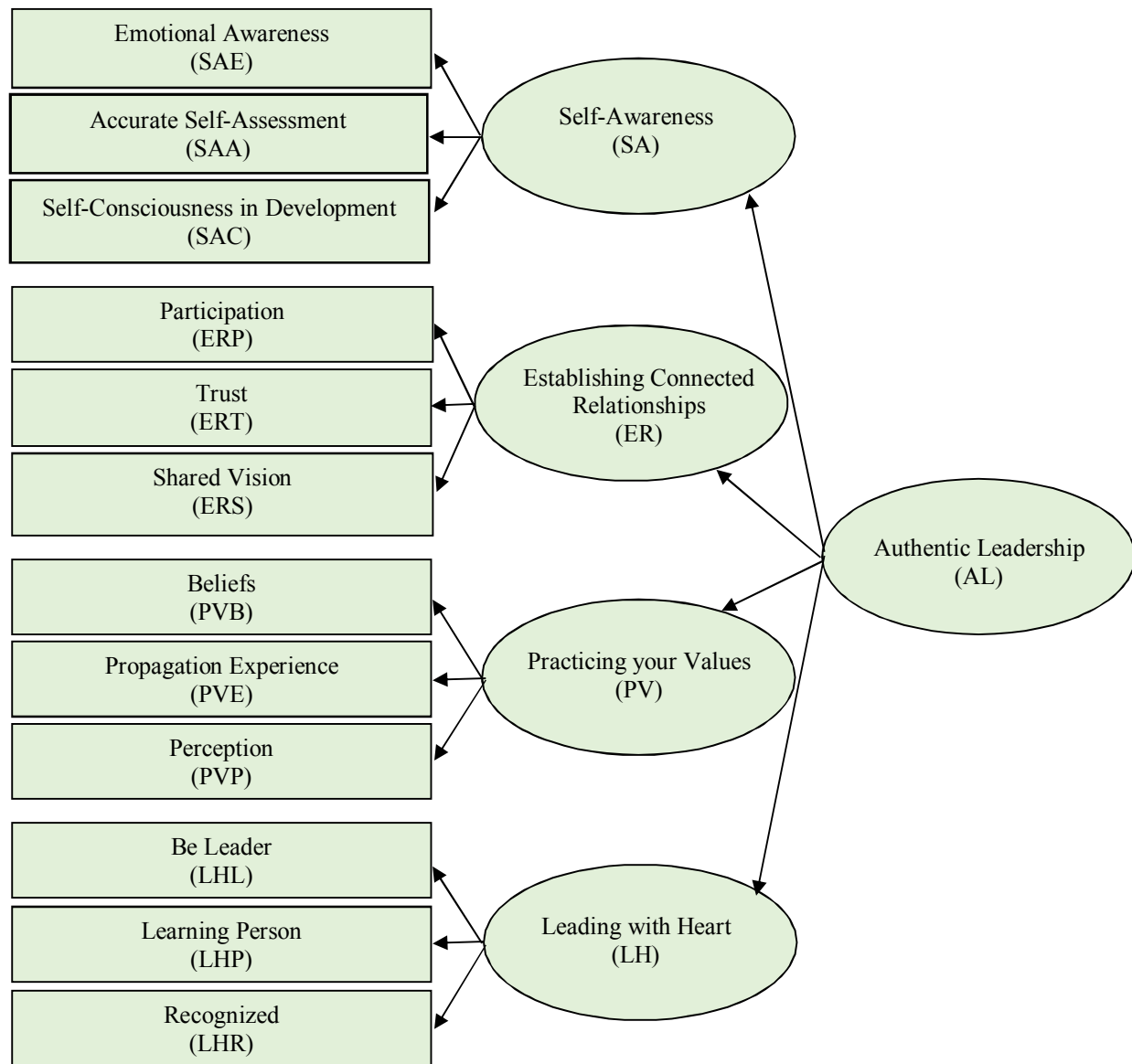


Figure 1. Theoretical Model of Authentic Leadership

According to the theoretical model of the Authentic Leadership (AL) shown in the Figure 1, the researchers have investigated the theories and continuous research in order to define the indicators of the minor factors and found 71 indicators (all the indicator are not shown in this research because they are overabundant) regarded as the theoretical model of the Authentic Leadership (AL) which points out the structural relationship between 4 major factors and the 12 minor factors as well as 71 indicators. These factors and indicators can be applied for the future study as being relevant to the research questions: (1) Is the theoretical model of the Authentic Leadership (AL) expressing the structural relationship between the 4 major factors and the 12 minor factors as well as the 71 indicators fit to the empirical data derived from the samples in the Buddhist scripture schools?, and (2) Do the factor loading of the major factors, the minor factors, and the indicators follow the determined criteria?

1.3 Hypotheses

The theoretical model of the Authentic Leadership (AL) expressing the structural relationship between the 4 major factors and the 12 minor factors as well as the 71 indicators was constructed by using the empirical definition with the certain qualified theories and research papers (Wiratchai, 2002). The researchers have searched and studied the relevant research from many resources, and summarized them with the synthesized method in order to gain the major

factors, the minor factors, and the indicators consisting of the construct validity and the content validity. Moreover, Ratchapat (2011) has conducted the research titled Indicators of Teacher Leadership for Teachers in Basic Education Schools and the aim is to examine the theoretical model containing the theoretical model relevant to the empirical definition as well. The results are fit to the hypothesis. Therefore, in this research, the researchers have set up the hypotheses to expect the answer as followed; (1) The researchers' theoretical model of the Authentic Leadership (AL) is fit to the empirical data regarding the criteria of Hair, Black, & Anderson (2010) i.e. (1) Relative Chi-Square (CMIN/DF) less than 3.00 (2) Root Mean Square Error of Approximation (RMSEA) lower than 0.05 (3) Goodness-of-Fit Index (GFI) (4) Adjusted Goodness-of-Fit Index (AGFI) (5) Comparative Fit Index (CFI), and (6) Normed Fit Index (NFI) between 0.90 – 1.00. (2) The major factors of the theoretical model of the Authentic Leadership (AL) contain the loading factor which is equal or higher than 0.70 (Farrell & Rudd, 2009) whereas the minor factors and the indicators contain the loading factor which is equal or higher than 0.30 (Tacq, 1997)

If the research results are in accordance with the research hypothesis, the teachers themselves or the school or the jurisdiction can use the research results as a guideline for developing or for monitoring and evaluating the authentic leadership of the teachers in the General Education Session of the Buddhist Scripture Schools in Thailand precisely due to the supporting research results.

3. Method

2.1 Identify Subsections

There are three methods to develop the education indicator, namely (1) *pragmatic definition* is the method the researcher selects the variables by himself/herself in order to present the model (2) *theoretical definition* is method the researcher constructs the model by applying the relevant theories and research and employ the model in reality or asking the experts to scrutinize the model before use (3) *empirical definition* is the method the researcher construct the model by applying the relevant theories and research and the model will be examined with the empirical data. If there is the concordance between the theoretical model and the empirical data collected from the random samples and the data is analyzed by confirmative factor analysis, the data can be utilized for the future research (Wiratchai, 2002)

In this research, the *empirical definition* is used to develop the indicators as Sanrattana (2018) points out that it is likely to be more scientific because the empirical data is used to collect the random samples from the population. Consequently, there is no weakness in term of the bias from the researchers' or the experts' personal sensation and experience as below.

2.2 Population and Sample

The population in this research were the 2,275 teachers in the general education session of the Buddhist scripture schools. (The National Office of Buddhism, 2014). They were collected from 403 Buddhist scripture schools around the country. The sample size was determined by using the Rule of Ratio between sample units per parameter 20: 1. The amount of parameter was counted from the sum of 5 latent variables, 12 observed variables, and 16 effect lines, and the total sum = 33 parameters. Consequently, the sample size is 660 samples.

2.3 Instrument

The instruments of research were the two questionnaires; 1) the questionnaire on status of respondents contains the checklist form 2) the behavior questionnaire on authentic leadership of the teachers in the general education session of the Buddhist scripture schools contains the value evaluation form of 5 rating scale classified to the major factors and the minor factors. It consists of 71 questions. This questionnaire was constructed and developed by the researchers themselves from the process of operation as followed; (1) to scrutinize the theories and relevant research in order to synthesize the major factors (2) to scrutinize the theories and relevant research in order to synthesize the minor factors (3) to scrutinize the theories and relevant research in order to determine the indicators of the minor factor (4) to construct the question items from the indicators and construct the checklist form of fitness between the questions and the indicators and to ask the 7 experts of educational administration department in order to examine the question items and the indicators (5) to improve the questionnaires and do the try-out with the teachers, not the samples in research, in the general education session of the Buddhist scripture schools. The 30 try-out teachers were randomized and data were analyzed to find the alpha coefficient of reliability by employing Cronbach. The results revealed that the questionnaires contain the alpha coefficient of reliability = 0.963, when classifying the major factors, the self-awareness = 0.857, establishing connected relationships = 0.920, practicing your values = 0.916, leading with heart = 0.900. these showed that the alpha coefficient of reliability was higher than the criteria at 0.70 (Prasertratsin, 2003).

2.4 Data Collection

According to the population, the 2,275 teachers in the general education session of the Buddhist scripture schools, the researchers had employed the proportional random sampling and the simple random sampling without replacement and within computer program., and had gained the 660 samples for data collection in this study. Then, the questionnaires were distributed to the randomized samples by parcel post. After five months, the 527 samples (79.85 %) had returned the questionnaires. From the number of the returned questionnaires, when considering the Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy, it was between 0.911 – 0.948. this claims that the questionnaires from the 527 samples are sufficient for confirmative factor analysis.

2.5 Data Analysis

The researchers had analyzed the data by employing the computer program to calculate the following statistics; (1) the value of frequency and percentage indicating the basic data of the sample; (2) the average and distribution coefficient for investigating the suitability of indicators; (3) Pearson Product – Moment Correlation Coefficients and Bartlett’s Statistics to consider the suitability of variables for confirmative factor analysis, and KMO (Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequate to consider the sufficiency for confirmative factor analysis; and (4) the first order of Confirmatory Factor Analysis and the second order of Confirmatory Factor Analysis in order for testing the fitness the theoretical model and the empirical data by using AMOS

2. Results

2.1 *Is the theoretical model of the Authentic Leadership (AL) expressing the structural relationship between the 4 major factors and the 12 minor factors as well as the 71 indicators fit to the empirical data derived from the samples in the Buddhist scripture schools?*

Due to the first order of confirmatory factor analysis for testing the fitness of the measurement models of the four factors i.e. measurement model of Self-Awareness, measurement model of Establishing Connected Relationships, measurement model of Practicing Your Values, and measurement model of Leading With Heart, the results reveal that all the measurement models which are the theoretical models are fit with the empirical data regarding the comparative statistics and the determined criteria as shown in the Table 1 below.

Table 1. The results of the first order of confirmatory factor analysis testing the fitness of 4 theoretical models that with empirical data in comparison with the set criteria.

Measurement Model / Criteria	<i>CMIN</i>	<i>RMSEA</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>NFI</i>
	> 3.00	>0.05	0.90- 1.00	0.90- 1.00	0.90- 1.00	0.90- 1.00
Self-Awareness (SA)	1.003	0.002	0.993	0.970	1.000	0.998
- Emotional Awareness (SAE)						
- Accurate Self-Assessment (SAA)						
- Self-Consciousness in Development (SAC)						
Establishing Connected Relationships (ER)	0.969	0.000	0.994	0.971	1.000	0.998
- Participation (ERP)						
- Trust (ERT)						
- Shared Vision (ERS)						
Practicing Your Values (PV)	1.116	0.014	0.994	0.974	1.000	0.998
- Beliefs (PVB)						
- Propagation Experience (PVE)						
- Perception (PVP)						
Leading with Heart (LH)	1.104	0.013	0.989	0.962	1.000	0.997
- Be Leader (LHL)						
- Learning Person (LHP)						
- Recognized (LHR)						

Results of the Research has confirmed that Self-Awareness (SA), Establishing Connected Relationships (ER), Practicing Your Values (PV), and Leading with Heart (LH) is the most significant component of Authentic Leadership (AL) by displaying in sub-component scale on the 12 scales.

Authentic leadership (AL)	Self-Awareness (SA)	
	SAE	= SAE1+SAE2+SAE3+SAE4+SAE5 = (0.54+0.66+0.81+0.43+0.20) = 2.64
	SAA	= SAA6+SAA7+SAA8+SAA9+SAA10 = (0.36+0.41+0.43+0.47+0.38) = 2.05
	SAC	= SAC11+SAC12+SAC13+SAC14+SAC15+SAC16+SAC17+SAC18 = (0.46+0.99+0.47+0.99+0.15+0.96+0.43+0.44) = 4.89
	Establishing Connected Relationships (ER)	
	ERP	= ERP19+ERP20+ERP21+ERP22+ERP23 = (0.14+0.94+0.19+0.11+0.22) = 1.60
	ERT	= ERT24+ERT25+ERT26+ERT27+ERT28+ERT29 = (0.94+0.18+0.14+ 0.79+ 0.18+0.83) = 3.06
	ERS	= ERS30+ERS31+ERS32+ERS33+ERS34+ERS35+ERS36 = (0.85+0.18+0.11+0.91+0.16+0.18+0.15) = 2.53
	Practicing your Values (PV)	
	PVB	= PVB37+PVB38+PVB39+PVB40+PVB41 = (0.10+0.97+0.21+0.17+0.18) = 1.63
	PVE	= PVE42+PVE43+PVE44+PVE45+PVE46 = (0.09+0.94+0.87+0.91+0.15) = 2.96
	PVP	= PVP47+PVP48+PVP49+PVP50 = (0.89+0.94+0.79+0.13) = 2.75
	Leading with Heart (LH)	
	LHL	= LHL51+LHL52+LHL53+LHL54+LHL55+LHL56 = (0.84+0.14+0.89+ 0.15+ 0.15+0.94+0.23) = 3.34
	LHP	= LHP58+LHP59+LHP60+LHP61+LHP62+LHP63 = (0.11+0.86+0.93+0.20+ 0.17+0.21) = 2.48
LHR	= LHR64+LHR65+LHR66+LHR67+LHR68+LHR69+LHR70+LHR71 = (0.92+0.98+0.71+0.69+0.08+0.98+0.99+0.10) = 5.45	

According to the scale elements above, Researchers have set a measurement model of authentic leadership (AL) to analyze data for testing the fitness of models with empirical data by analysis the second order of confirmed factors were found that the measurement model of Authentic leadership (AL), a theoretical model is fit with empirical data by considering on the statistical comparison of the criteria was set out in Table 2.

Table 2. The result of the second order of confirmatory factor analysis, therefore, to test the fitness of the theoretical model of authentic leadership with empirical data in comparison with the set criteria.

	<i>CMIN</i>	<i>RMSEA</i>	<i>GFI</i>	<i>AGFI</i>	<i>CFI</i>	<i>NFI</i>
Measurement Model / Criteria	> 3.00	>0.05	0.90- 1.00	0.90- 1.00	0.90- 1.00	0.90- 1.00
Authentic leadership (AL)	1.332	0.023	0.998	0.973	1.000	1.000
- Self-Awareness (SA)						
- Establishing Connected Relationships (ER)						
- Practicing Your Values (PV)						
- Leading with Heart (LH)						

In addition, according from reviewing of the loading factor of the 4 major factors show the positive and statistically significant at the .01 level and all values for each major factors has loading factor element as following: (1) Self-Awareness (SA) was 0.99 (2) Connected Relationships (ER), was 1.01 (3) Practicing Your Values (PV) was 1.07, and (4) Leading With Heart (LH) was 0.94. Thus creating scaled elements of Authentic Leadership (AL), therefore the equation $AL = 0.99SA + 1.01ER + 1.07PV + SA + 0.94 LH$.

2.2 Do the factor loading of the major factors, the minor factors, and the indicators follow the determined criteria?

The results of determining the factor loading show as following: (1) the weight of the loading factor of 4 major factors are positive and statistically significant at .01 level in all the elements. Therefore, leading with heart (LH) has the lowest factor loading as 0.94; it is higher than the threshold level as 0.70.

The weight of the loading factor of 12 minor factors in four major factors is positive and statistically significant at the .01 level. All values elements perception has a valuable factor loading lowest as 0.58, but it is the higher than the threshold level as 0.30.

The weighing of factor loading of the 71 indicators in 12 minor factors is positive and statistically significant at .01 level in every value. Therefore, an indicator to let others get to know and accept what happened (PVE42), therefore, the lowest loading factor is 0.31, but it is a value that is higher than the threshold as 0.30. When we considered in different levels of weighting elements showed that theoretical models of Authentic Leadership (AL) represents the relationship of the four major factors, 12 minor factors and 71 indicators which can be used for guiding the development of teachers in the general education session of Buddhist scripture schools, in construct validity way which has supported by the results of this study.

3. Discussion and Recommendations

In the manner of the research results showed that the theoretical model of Authentic Leadership (AL) which constructed has generated fit with the criteria of empirical data that were described in 2 reasons as following.

As the results of the theoretical models of Authentic Leadership's fitness with the empirical data according to the set criteria show, there are reasons that the researchers discuss two aspects as in the studies of Marwieang, Sanrattana & Suwannoi (2018) and Somsueb, Phrakrusutheejarriyawat & Suwannoi (2018) as follows: The first aspect is looking at **the Outside – In**. It looks from theory and research funding that use a theoretical model which consistent with the expression or the behavior of the samples used in the research as informal, a social socialization and authentic leadership; thus occurring in various corners of the world as well as in Thailand. As the view point of Croucher (2004) who discusses the popular globalization process of the world is fused into a single society, the process caused by the force of influence company economy, technology, socio-cultural and political events. View point of Gleeson (2018) who mentions the development of technology effect changes in the 21st century has significantly affected social, cultural, moral education, economy, and politics. Internet network plays the main role in communication contact between people all over the world. And also the perspective of Albanese (2018) who mentions the use of the computer is a mechanical key in the society as a tool to receive and convert data quickly and no limitations. The computer takes main roles as communication over the growth in a short time. In a few years, the computer system was developed from a large and expensive to be a smaller personal computer. Moreover, it has the quality, high potential and cheap. In short, a computer is an important tool for propagating information in global society. The second is **the Inside - Out** perspective it looks from the real phenomenon of teachers in the general education session of Buddhist scripture schools makes in behavior or expression that is fit with the theories and researches on the Authentic Leadership. That has been occurring in various corners of the world. Therefore, it's possible reason that the teachers used to the context of social and cultural associated with the teachings and practices of Buddhism as same as learners, especially in the teachings and practicing on virtue, concentration, discernment or wisdom, mindfulness, wholesomeness, skillfulness, persevering effort, patient endurance, truthfulness, determination, mind or heart (Vidyavuddhikula, 2013) adaptability, attention, attentiveness, bases of mindfulness, basis of success, benevolence, charity, cognizable, compassion, comprehension, consciousness, development, effort, endurance, faith, feeling shame, generosity, gratefulness, humility, lovingkindness, morality, perception, self – possession, sympathetic joy. (The English-Thai Dictionary of Buddhist Terms, n.d.)

However, whether the reason for the fitness in the aspect of the first or the two aspects. The fitness shows that the finding of this research has useful expected: such as (1). It used as a guide in the development of authentic leadership to the teachers in the general education session of Buddhist scripture schools in effectiveness way that supported by researches. Moreover, it has used in the monitoring and evaluation of the development of achieving the expected purposes. (2) The national office of Buddhism or other institutions such as schools under the national office of basic education or relevant departments and personnel development those concerning theoretical model. Therefore, the result of this research shed light on the way of developing their personality. (3) to encourage new knowledge, which is appropriate and accordance with the Thai context. It can be used as a reference to researches which have the same methodology or regulation and another obtaining a more complete theoretical model in the future. (4) To be used for doing continuously with other kinds of researches, such as creating a structural equation modeling research and a research and development model, moreover, in participatory action research, etc.

In addition, the research found that the major factors and minor factors and indicators with the factor loading showed that the theoretical models which created with the construct validity. In this way, the researchers believe that the results of the operational researching; since the literature review until the final we got the hypothetical model to create the construct validity and content validity of the study. In addition, the consistency between the major factors, minor factors, and indicators of the subsidiary were examined by the experts. This has the Index of Congruence (IOC) higher than the criterion. Furthermore, the questionnaire has investigated the consistency of the questions with the indicator value index consistency high than the criterion as well. This makes the result in the data collected from the sample is accurate and reliable.

It shows that the theoretical models of Authentic Leadership (AL) can be applied in the development of Authentic Leadership for teachers in the General Education Session of The Buddhist Scripture Schools in Thailand with research guarantee. In the case of staff development, the coverage of the four major factors should be taken into account as well as the 12 minor factors and the factor loading values – from high to low, as shown as an administration conceptual framework for using as a guideline for developing or for monitoring and evaluating the authentic leadership of the teachers in the General Education Session of the Buddhist Scripture Schools in Thailand precisely due to the supporting research results in Figure 2 (ranking the importance according to the factor loading values from high – low for both major and minor factors).

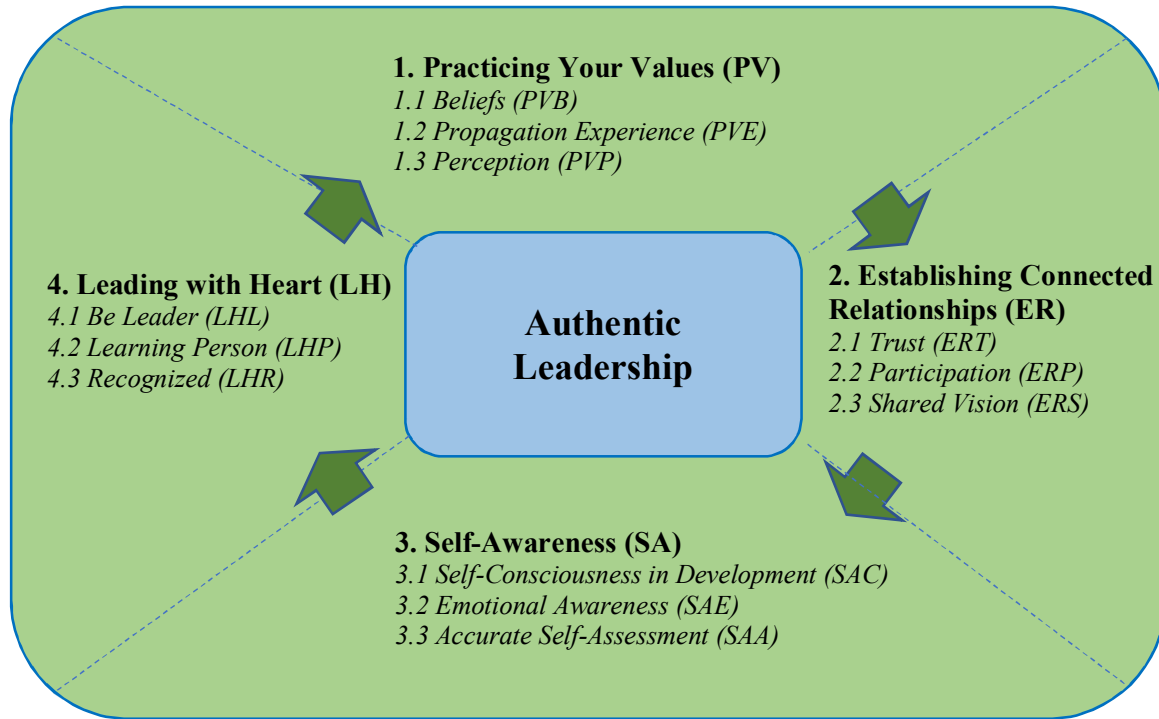


Figure 2. Oriented management framework for introducing the application of Authentic Leadership (AL) model used

The model will have use as a guideline in the development of authentic leadership to the teachers in the general education session of Buddhist scripture schools. Moreover, there is not only developing their own abilities by the social and cultural contexts but the teachers should consider in self-development according to theory and research that widely used in Thai society and in the world. As a result of this research has confirmed that the theoretical model of the authentic leadership in this research is fit with empirical data.

Thus, the theory suggests that authentic leadership is appropriate for teachers in the general education session of Buddhist scripture schools. In other hand behavior and expression of teachers in the schools that consistent with the theories of the theoretical model appropriately and effectively.

Nonetheless, to realize the major factors used in this research is the result of the study from the 16 reference sources which have the major factors, in theory, all 38 elements. But have been selected for use in the research only 4 elements by taking from the high-frequency method. Therefore, 34 elements were remaining is not used in this research. In this way, some interesting elements may be the result of a new discovery, such as build engagement and resilience, develop others, understanding your purpose, demonstrating self-discipline, imagery, real selves, mission-driven and focused on results, self-actualized, empathy, whole system awareness, personal power, dealing with dualities & paradox, being present, truthful self-concepts, enthusiastic support, openness, courageous, commit to excellence rather than perfection, leave a legacy, fair-mind, a positive ethical foundation, and empowering people to lead. In the end, we would like to recommend to other researchers in the future who interested in the research area of developing indicators of authentic leadership considering other elements those used in research or in development.

References

- Albanese, A. (2018). *What is the effect of computer technology in education?*. Retrieved August 10, 2018, from <https://bit.ly/2OzbI2S>
- Bruyckere, P.D., Kirschner, P.A., & Huang, Y.X. (2016). *Authentic teachers: Student criteria perceiving authenticity of teachers*. Retrieved 18 September, 2018, from <https://bit.ly/2OydcKx>
- Croucher S.L. (2004). *Globalization and belonging: The Politics of identity in a changing world*. New York: Rowman & Littlefield.
- Farrell, A. M. & Rudd, J. M. (2009). *Factor analysis and discriminant validity: A Brief review of some practical issues*. Retrieved September 21, 2019, from <https://bit.ly/2HiPXm3>
- Gleeson, P. (2018). *How is technology impacting the changes in the 21st century workplace?*. Retrieved August 10, 2018, from <https://bit.ly/2MJDIie>
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis*. (7th Ed.). Upper Saddle River, NJ: Prentice Hall.
- Lavin, S. (2016). *What is authentic leadership and why is it important?*. Retrieved 18 September, 2018, from <https://bit.ly/2pi2cGc>
- Marwieang, K., Sanrattana, W. & Suwannoi, P. (2018). Indicators of resourceful leadership for secondary school principals: Developing and testing the structural relationship model. *International Education Studies*. Vol. 11 No. 11, November 2018, and Online published in October 2018.
- National Office of Buddhism (2014). *General Buddhist scripture schools in academic year 2014*. Retrieved October 15, 2014, from <https://bit.ly/2NQel3a>
- Othman, M. Z. (2011). *Educational management and administration*. Retrieved November 1, 2015, from <https://bit.ly/2xojSn2>
- Prasertratin, S. (2003) *Research methodology in social science*. Bangkok: Puengfa Printing.
- Pyne, C. (2014). *A Quality education begins with the best teachers, says Christopher Pyne*. Retrieved September 18, 2018, from <https://bit.ly/2OydpGw>
- Ratchamunee, P. (2012). *Progress on education of general Buddhist scripture schools*. Retrieved October 15, 2018, from <https://bit.ly/2NODv2a>
- Ratchapat, A. (2011). *Indicators of teacher leadership for teachers in the Basic Education School*. Ph.D. Dissertation in Educational Administration Program, Graduate School, Khon Kaen University.
- Sanrattana, W. (2014). *Leadership: Theory and temporary perspectives*. Bangkok: Tipwisut.
- Sanrattana, W. (2018). *Research in educational administration: Concepts, guidelines, and case studies*. 4th Edition, Bangkok: Tipwisut.
- Somsueb, A., Phrakrusutheejaritawat & Suwannoi, P. (2018). Indicators of innovative leadership for secondary school principals: developing and testing the structural relationship model. *International Education Studies*. Vol. 12 No. 1 January, 2018, and Online published in December 2018.
- Tacq, J. (1997). *Multivariate analysis techniques in social science research: From problem to analysis*. London: SAGE Publications Ltd.
- The English-Thai Dictionary of Buddhist Terms (n.d.). *Buddhist terms*. Retrieved September 18, 2018, from <http://www.nkgen.com/buddhist/buddhist10.htm>
- Vidyavuddhikula, R. (2013). *Vocabulary of dhamma*. Retrieved September 18, 2018, from <https://bit.ly/2xwSZO3>
- Wiratchai, N. (2002). *Development of indicators for assessment of administration and management of Educational Service Areas*. Bangkok: Thanaksorn.
- York-Barr, J., & Duke, K. (2004). *What do we know about teacher leadership? findings from two decades of scholarship*. Retrieved September 18, 2018, from <https://bit.ly/2xIkYkB>