The Relationship between Factors Affecting the Public Mind: Developing a Model for University Students

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Abstract

The purpose of this research is to develop a model of factors affecting the public mind among university students. The first sample used consisted of 375 students. The second sample was made up of the experimental group, which consisted of 36 students who participated in learning units, and the control group, which consisted of 17 students. The instruments utilized were tests, questionnaires, and evaluation forms. Quantitative data was analyzed in terms of frequency, percentage, mean, standard deviation, and multiple regression. The findings indicated that factors affecting the public mind of students were social support, self-efficacy, and attitude towards the public mind. The multiple correlation coefficient between these factors and the public mind of students was equal to .77. These factors explained 59.4% of the variance of public mind of students. The study also found that knowledge about public mind and the public mind of the experimental group was significantly higher than the control group. The model adopted considering factors affecting the public mind consisted of principles and rationale, objectives, methods of operation, content, and measurement and evaluation.

Keywords: Public mind, support, parenting, self-efficacy, attitude, modeling

Introduction and Literature Review

In Thailand, the key to sustainable human development is education, which will protect the youth (Chalapirom et al., 2019). As society becomes more complex, educational institutions shoulder the responsibility to prepare as many of the youthful generation as possible to cope and flourish (Office of the National Economic and Social Development Board, 2017). As stated by the Higher Education Act of 2019, Section 40, higher education institutions are responsible for providing academic services to communities and society. For this reason, higher education institutions must encourage students to participate in various social activities. Without institutional intervention or prompting, students would not take the initiative to plan public service activities and will thus lack willingness to sacrifice for the common good (Kampan et al., 2015). As a result, interest in helping others will decrease, and the effectiveness of good citizenship of the state will also decrease (Pratoomthai et al., 2018).

With its value and benefits to the nation at large, it becomes necessary to develop society and the country, especially the youth (Thai Ministry of Education, 2008). As a Thai higher education institution, Nakhon Ratchasima Rajabhat University supports the notion of a public mind through graduates who have good moral knowledge, a sense of being Thai, universal thinking, as well as love and commitment to the local community. Having these characteristics is not only a signature of this university, but it also corresponds with the royal initiative for local development (Boonchan et al., 2017). To effectively instill the notion of public mind among students, there needs to be a clear understanding of factors that may have an impact on this process. Hence, in this study, factors were investigated that are believed to influence the development of a public mind. The findings were expected to inform the contextualized process of developing a public mind, which bears significant educational implications.

Public Mind in Thailand: Service to Society

Currently, there is a campaign for Thai people to show a spirit of volunteerism with the military units of the Royal Chamberlain. This campaign finds its roots in the incident where 13 youthful football players and coaches were rescued after being trapped in a cave in Tham Luang, Khun Nam Nang Non Forest Park on 23 June 2018. The success of this operation would not have been possible without the cooperation, dutifulness, and sacrifice of all those involved. When volunteering with a public mind, volunteers are not procuring money or fame; instead, it is the satisfaction found in helping society

become better than it was before (Ajpru, 2013; Wongkun, 2013). Together with the spirit of volunteerism, public mind also involves having a sense of generosity to fellow humans and compassion for the good of society (Wasi, 2007). Moreover, having a public mind not only refers to helping other people, but also means to conserve the environment and to support positive social reform. Maintaining a public mind has been found to result in a more positive disposition (Visalo, 2011). Individuals will also be more cognizant and more willing to learn through reflection (Suyajai, 2013).

Besides higher education and educational institutions in general, other entities may be involved in the development of the public mind. These includes family, religious groups, and the media (Sutthirat, 2013). All these entities need to work with each other to foster a public mind. If one or more entities fail to see the value of having a public mind, then the efforts by others may go wasted. When the value of public mind is reduced, the whole community, and even nation, will suffer as there is constant competition and disagreement between community groups and members (Chanasuwan et al., 2018). Along with the responsibility held by different entities, a public mind also consists of many facets. On top of volunteerism, there are also other characteristics, such as practices of a practical nature, caring for public property, public responsibility, respecting the rights of the public, and willingness to help others (Jaichalad, 2017; Jitsaeng, 2018).

A public mind, as influenced by entities found in a community, indicates that the notion is conceptually complex. To understand the notion of public mind and the process to nurture a public mind, studies have identified several factors, especially within the education setting. From these studies, factors that are found to directly or indirectly influence students' public minds are morality, ethics, teacher training, democratic parenting, emotional intelligence (Pewpet et al., 2012), attitude towards public mind (Nakasaney et al., 2014), modeling (Amornbunpiti, 2010), social support (Pongsritasana, 2010), and self-efficacy (Supapoj, 2018). These factors will be discussed briefly in the following paragraphs.

Social Support

Social support refers to interpersonal interaction consisting of emotional support, decision making, and assistance. Emotional support arises from closeness, attachment, love, care, and trust. Supporting ideas and decisions is based on acceptance and appreciation. Providing assistance in various aspects, such as advice, information, objects or services, and feedback makes a person feel emotionally stable (Snyder & Lopez, 2002). Moreover, social support is a relationship in a society that provides material and interaction resources (Edvardsson et al., 1994). It is the exchange of resources between two people that is meant to achieve well-being. In addition, social support can be formed through social bonds with other people, groups, or larger communities.

Parenting

Parenting refers to contact between the caretaker and the child through speaking and acting. It is communication with children both in action and at the emotional level. In addition, it is also an opportunity for children to look at the behaviors of their caretakers (Sanamkate & Bhanthumnavin, 2016). Children learn about the development of attitudes, beliefs, values, knowledge, and hopes of society, as well as how to behave appropriately, through observing their parents. The three types of parenting styles are Permissive Parenting (which provides few behavioral guidelines because parents do not want to upset their children), Authoritarian Parenting (a parents-know-best approach that emphasizes obedience), and Authoritative Parenting (blends a caring tone with structure and consistency) (Green & Kreuter, 2005).

Self-efficacy

Self-efficacy, which was proposed by psychologist Albert, refers to the personal judgment of how well one can execute courses of action required to deal with prospective situations (Bandura, 2007). Simply put, it is a person's belief in their own ability to perform their work (Greenberg, 2002). Belief in one's own perceptions can influence many aspects of life. The ability of people is not fixed but

flexible according to circumstances (Matsushima & Shiomi, 2003). People who believe that they are capable will have patience, perseverance, not give up, and will eventually succeed (Graham, 2011).

Attitude towards Public Mind

Conspicuous values have a significant positive relationship to attitude (Vinijcharoensri, 2016). In psychology, attitude is a psychological construct, a mental and emotional entity that is inherent to or characterizes a person (Perloff, 2016). It is an individual's predisposed state of mind regarding a value and is precipitated through a responsive expression towards a person, place, thing, or event (the attitude object), which in turn influences the individual's thought and action (Minton & Khale, 2014). Attitudes towards the public mind are emotions, feelings, thoughts, beliefs, and trends in a person's behavior in a direction that they either like or dislike, are satisfied or dissatisfied with. It is something that happens automatically, caused by learning and experience. Attitude is an emotion or feeling that arises from opinions by showing one's inclined behavior in the form of an assessment such as a like or dislike (Saiyot & Saiyot, 2010). The attitude variable has been found to have a direct influence on the public mind, with a path coefficient equal to .16 (Makeeree & Rinthaisong, 2017).

Attitudes can be influential on many processes, such as being utilitarian (useful), social, relating to values, or a reduction of cognitive dissonance. They can be beneficial and help people interact with the world. An attitude's function is more important than whether it is accurate or correct (Carpenter et al., 2012). University students with a positive attitude towards public mind will do things that are beneficial to themselves, society, and the nation. Furthermore, students are satisfied with their service to the university and choose to participate in volunteer activities willingly and more frequently.

Modeling

People who are observed are called models and the process of learning is called modeling (Newman & Newman, 2007). Bandura's stated second and third stages of social learning, imitation and behavior modeling will occur if a person observes positive, desired outcomes in the first stage. If, for example, an instructor attends and observes a course in-world and is entertained, informed, and approves of the way students act, they are more likely to want to teach a course in-world themselves. They can then use the behavior that they experienced to imitate and model other instructors' teaching styles in-world (Bandura, 2007). The model is a characteristic of learning behavior. It is the learning that a person observes from behavior of the model. These may be famous people, teachers, parents or friends. Especially when the model shows some behavior that has been reinforced, the tendency to emulate the behavior of that model is high. On the other hand, if the model shows certain behavior and is punished, the person will not imitate that behavior. The model may be a person or object. The person who sparks a teenager to emulate or inspire is the person the teenager wishes to be like in some way. The person can either be alive or deceased (Kanchanapee & Jetchamnongnuch, 2009).

The Study

Concept of Model Development

A model refers to a systematic relation pattern of components (Nopphakhun et al., 2017). It is a simulation of the truth of a phenomenon in order to understand the relationships found within that phenomenon (Stoner & Wankel, 1986). Models generally have the following important components: (a) the model must lead to prediction and the consequences must be proven, (b) The structure of the model must consist of a causal relationship that can explain the phenomena in that matter, (c) the model must be able to help create images, concepts, and interrelations as well as helping to expand the scope of the quest, and (d) the model should consist of structural relationships rather than associative relationships. The present researcher synthesized the concept of academics (Sestapanich, 2007; Runcharoen, 2012; Chulajata & Chattiwat, 2013; Klayluck et al., 2013; Nopphakhun et al., 2017; Nadler & Nadler, 1989) and concluded that the development of the model had five components which are (a) principles and reasoning, (b) objectives, (c) methods of operation, (d) content, and (e) measurement and evaluation.

Methodology

A research and development strategy was adopted using a mixed research methodology. The term "mixed methods" refers to an emergent methodology of research that advances the systematic integration or "mixing," of quantitative and qualitative data within a single investigation or sustained program of inquiry (Creswell & Clark, 2011). The methodology was separated into two parts:

Part I: Investigating Factors Affecting the Public Mind

The sample for investigating factors affecting the public mind consisted of 375 Nakhon Ratchasima Rajabhat University students. The research instruments used were questionnaires that were developed by the current researcher and divided into three parts: Part 1, general information; Part 2, public mind; and Part 3, factors affecting the public mind. The Item-Objective Congruence Index was between .80 and 1.00. The public mind was divided into six components that were (a) useful activities (items 1–8), (b) caring for the public (items 9–18), (c) public responsibility (items 19–26), (d) respecting the right to use the public (items 27–30), (e) willing to help others (items 31–36), and (f) the efficient use of public (items 37–42). The public mind questionnaire had a reliability value of .95. The present researcher created a public mind questionnaire with five rating levels from frequent practice to no practice. Factors affecting public mind included (a) social support (items 1–8), (b) parenting (items 9–17), (c) self-efficacy (items 18–24), (d) attitude towards public mind (items 25–32), and (e) modeling (items 33–38), which had Cronbach's alpha coefficient factor reliability scores of .96, .94, .89, .90, and .57, respectively. The public mind and factors affecting the public mind were summarized using means and standard deviations. Other statistical analysis included Pearson's (r) correlation. Furthermore, the relationship between each factor was analyzed using multiple regression.

Part II: Comparing the Knowledge about the Public Mind and Public Mind

The sample for comparing knowledge about the public mind and public mind consisted of two classrooms, the members of which volunteered to participate in the program. The sample was randomly assigned to form the experimental and control groups—36 students in the experimental group and 17 students in the control group. The experimental group participated in three, fifty-minute sessions dealing with attitude towards the public mind, social support, and self-efficacy. The research instruments used in this section part were the same as those used in the first part including an evaluation form on the efficiency of model development. Knowledge about the public mind and public mind were compared by independent sample *t*-test.

Findings

Part I

The profile of respondents, level of public mind, and factors affecting the public mind are presented in Tables 1 to 3. From Table 1, it was found that most students were from the Faculty of Education, were female and ranged between 20 to 21 years of age.

Table 1 Profile of Respondents

Profile		Frequency	Percentage
Faculty:	Education	78	20.8
	Humanities and Social Science	93	24.8
	Management Science	117	31.2
	Science and Technology	53	14.1
	Industrial Technology	17	4.5
	Public Health	17	4.5
Sex:	Male	118	31.5
	Female	257	68.5
Age:	18–19 years	97	25.9
	20–21 years	165	44.0
	22years and above	113	30.1

Factors affecting the public mind of students are presented in Tables 2 to 5. From Table 2, the public mind of Nakhon Ratchasima Rajabhat University students, seen through the overall average, is at a high level. When considering each component, it was found that each was at a high level, too. The highest mean was "Respecting the right to use the public mind" (M = 4.38). The lowest mean was "Willing to help others" (M = 4.12).

Table 2 Mean and Standard Deviation of the Public Mind

Components	М	SD	Level
Practical practice	4.23	0.50	High
Caring for the public	4.16	0.45	High
Public responsibility	4.16	0.51	High
Respecting the right to use the public.	4.38	0.52	High
Willing to help others	4.12	0.53	High
Public use	4.32	0.50	High
Average	4.21	0.40	High

From Table 3, it can be observed that the overall average value of factors affecting the public mind was at a high level (M = 3.95). When considering each factor, it was found that the majority of factors were at a high level. The highest mean was attitude towards the public mind (M = 4.17). The lowest mean was parenting (M = 3.38).

Table 3 Mean and Standard Deviation of Factors Affecting the Public Mind

Items	М	SD	Level
Social support (X ₁)	4.16	0.55	High
Parenting (X ₂)	3.38	0.73	Medium
Self-efficacy (X₃)	4.16	0.55	High
Attitude towards public mind (X ₄)	4.17	0.58	High
Modeling (X₅)	4.01	0.70	High
Average	3.95	0.47	High

From Table 4, it can be seen that three factors affected the public mind of Nakhon Ratchasima Rajabhat University students (statistical significance of .01). The most influential factors were public attitudes (X_4), social support (X_1), and self-efficacy (X_3). The multiple correlation coefficient between these factors and the public mind of Nakhon Ratchasima Rajabhat University students was .77. These factors could explain 59.4% of the public mind variance of the students investigated.

Table 4 Multiple Regression Step-wise Analysis on Factors Affecting the Public Mind

Model	Unstandardized Coefficients (b)	Standardized Coefficients (β)	t	p
Constant	1.57		13.38	.000
Attitude towards public mind (X ₄)	.34	.48	10.58**	.000
Social support (X ₁)	.16	.22	5.18**	.000
Self-efficacy (X ₃)	.14	.19	4.24**	.000

Note: R = .77, $R^2 = .59$, p = .000; **p-value < .01

The raw score and standard score can be written as follows:

 $\hat{Y}=1.574+.338(X_4)+.157(X_1)+.138(X_3)$

 $\hat{Z}y=.483(X_4)+.216(X_1)+.190(X_3)$

R = 0.917, R2 = 0.840, p = .000

Part II

The results of Part I indicated that attitude towards the public mind, social support, and self-efficacy affected the public mind of students. This permitted a model to be created to develop factors that affect the public mind of students. It consisted of five components: principles and reasoning, objectives, methods of operation, content, and measurement and evaluation. The following were some comments made by experts regarding the model: "Measurement and evaluation should be written in behavior because it will increase clarity;" "The question should be concise, clear and focus on keyword only;" "The content and illustrations should be added to make it easier to understand the theory and principles;" "Each unit should design action activities that are appropriate and diverse and not overlap;" "The purpose of each unit is for students to demonstrate public awareness of real-life situations in their society;" "Questions about the application should be added to the end of the unit;" "Measurement and evaluation should be consistent with objectives;" and "Each unit of study does not have to be the same number of questions."

The efficiency of model development and comparisons of knowledge about public mind and public mind of Nakhon Ratchasima Rajabhat University students are presented in Tables 5 to 7. From Table 5, it is evident that the efficiency of the form of factor development that affected the public mind of Nakhon Ratchasima Rajabhat University students as a whole was at the highest level. The aspect with the highest average was utilization (M = 4.77). The lowest aspect was rightness (M = 4.73).

Table 5 Mean and Standard Deviation of the Efficiency of the Model of Factors Development Affecting Public Mind of Nakhon Ratchasima Rajabhat University Students

Efficiency	Rightness		Appropriateness		Utilization			Feasibility				
	М	SD	Level	М	SD	Level	М	SD	Level	М	SD	Level
Principles and	4.93	0.25	Highest	4.96	0.18	Highest	4.90	0.30	Highest	4.83	0.37	Highest
Rationale												
Objectives	4.80	0.40	Highest	4.80	0.40	Highest	4.83	0.37	Highest	4.73	0.44	Highest
Methods of	4.73	0.44	Highest	4.83	0.46	Highest	4.73	0.44	Highest	4.73	0.44	Highest
Operation												
Content	4.66	0.47	Highest	4.66	0.47	Highest	4.76	0.43	Highest	4.83	0.46	Highest
Measurement	4.53	0.62	Highest	4.53	0.62	Highest	4.63	0.61	Highest	4.56	0.62	Highest
and Evaluation			-			-			-			-
Average	4.73	0.29	Highest	4.76	0.28	Highest	4.77	0.25	Highest	4.74	0.33	Highest

The data shown in Table 6 indicate that the knowledge about the public mind of Nakhon Ratchasima Rajabhat University students differed significantly (p = .002) between the experimental group and the control group.

Table 6 Comparison of Knowledge about Public Mind between the Experimental and Control Groups

Knowledge about Public Mind		М	SD	t	р
Experimental Group	36	21.44	3.48	3.33	.002
Control Group		18.29	2.54		

Data in Table 7 shows that the public mind of Nakhon Ratchasima Rajabhat University students differed, at a high level of significance, between the experimental group and the control group. The value obtained for the public mind of the experimental group was higher than the control group.

Table 7 Comparison of Students' Public Mind between the Experimental and Control Groups

Public Mind	n	М	SD	t	р
Experimental Group	36	4.37	0.29	4.31	.000
Control Group	17	4.28	0.40		

Discussion

For this research, the standardized coefficients (β) of self-efficacy (X_3) was equal to .19 and it was shown that it affected the public mind of the participants (statistical significance at the level of .01 in the t-test). In this study, self-efficacy can be treated as a belief that a student can perform public activities adequately in a given situation (Greenberg, 2002). Possessing self-efficacy will encourage students to participate in community activities. Furthermore, students who believe that they are self-efficient will most probably have high academic achievement (Motlagh et al., 2011). Students with their self-efficacy also are confident in deciding what they can do with their skills (Sin et al., 2015).

The standardized coefficients (β) of social support (X_1) was equal to .22 and it affected the public mind of Nakhon Ratchasima Rajabhat University students (statistical significance at the level of .01 in the t-test). Consistent with the study of Makeeree and Rinthaisong (2017), this study found that public mental variables are directly influenced by social support variables. Social support variables were able to predict (65.1% of variabiance) factors affecting the public mind of students at Silpakorn University, Phetchaburi Information Technology Campus (significant at the .001 level; Kleebsuwan & Rotjanalert, 2018). In addition, social support has relationships with self-efficacy (Wang et al., 2015). Social support is seen in interpersonal interactions consisting of emotional concern, instrumental aid, information, and appraisal. There are many social support sources for students, such as family, friends, teachers, or other social organizations (Yamwong, 2012). Social support stems from close relationships and trust. Students with social support will have a better quality of life (Snyder & Lopez, 2002) and will find opportunities to become social supporters (Edvardsson et al., 1994).

The standardized coefficients (β) of attitude towards public mind (X_4) was equal to .48 and it affected the public mind of Nakhon Ratchasima Rajabhat University students (statistical significance at the level of .01 in the t-test). Attitudes towards the public mind are emotions, thoughts, beliefs, and tendencies of a student's behavior in a direction that they like or dislike, or are satisfied or dissatisfied with. This feeling is automatic, which is caused by learning and experience (Srithong, 1999).

Concluding Remarks

There are two main implications of this study. The first is the research design utilized to verify the public mind of a particular group of students proved valuable. In this study, the development model of factors affecting the public mind of Nakhon Ratchasima Rajabhat University students consisted of five components: (a) principles and reasoning, (b) objectives, (c) methods of operation, (d) content, and (e) measurement and evaluation. Their relevance still will depend on specific circumstances or phenomena being studied. The principles for creating models are processes and conceptual steps. The theoretical concepts must be practical and can be evaluated in every component, process, and step.

The efficiency of the model of factor development affecting the public mind of Nakhon Ratchasima Rajabhat University students overall is at the highest level. This may be because the current researcher proposed a model to develop factors that affected the public mind of students at the University through a systematic process modified by suggestions from professionals.

References

Ajpru, H. (2013). Relationships between personal factors, leadership, lifestyle, self-directed learning ability, and public consciousness of nursing students, Bangkok Metropolis [Unpublished master's thesis]. Srinakharinwirot University, Bangkok, Thailand.

Amornbunpiti, V. (2010). The effect of a learner development program on public mind of prathom suksa five students, Samorakoat School. *Sripatum Chonburi Journal*, *9*(2), 86–92.

Bandura, A. (2007). Much ado over a faulty conception of perceived self-efficacy grounded in faulty experimentation. *Journal of Social and Clinical Psychology*, 26(6), 641–658.

Boonchan, B., Pupat, P., & Seesan, B. (2017). Causal model of variables affecting the creativity of undergraduate students. *Creative Education*, 8(2), 279–293. https://doi: 10.4236/ce.2017.82022.

Carpenter, C., Boster, F. J., & Andrews, K. R. (2012). Functional attitude theory. In J. Dillard and L. Shen (Eds.), *The SAGE handbook of persuasion: Developments in theory and practice* (pp. 104–119). SAGE.

- Chalapirom, B., Prathumsuwan, P., & Siribanpitak, P. (2019). Secondary school risk management strategies according to the concept of global citizenship development. *Journal of Education Studies*, 47(1), 188–211.
- Chanasuwan, L., Jantha, M., & Prasan, A. (2018). The public mind supporting model between community and school participation for kindergarten children. *Journal of Education Thaksin University*, 18(2), 159–169.
- Chulajata, S., & Chattiwat, W. (2013). The development of collaborative teacher-centered professional development model to enhance instructional competency promoting analytical thinking skills of elementary school teachers. *Silpakorn Educational Research Journal*, *5*(2), 113–133.
- Creswell, J. W., & Clark, V. L. (2011). *Designing and conducting mixed methods research*. Sage Publications.
- Edvardsson, B., Thomasson, B., & Ovretveit, J. (1994). *Quality of service: Making it really work* (quality in action). McGraw-Hill.
- Graham, S. (2011). Self-efficacy and academic listening. *Journal of English for Academic Purposes, 10*(2), 113–117. https://doi:10.1016/j.jeap.2011.04.001.
- Green, L. W., & Kreuter, W. (2005). *Health promotion planning: An education and ecological approach*. Mayfield Publishing.
- Greenberg, J. (2002). Behavior in organizations. Prentice-Hall.
- Jaichalad, N. (2017). The components to promote the morality on honesty, public mind and responsibilities for students of basic education schools. *Suan Dusit Graduate School Academic Journal*, 13(1), 63–71.
- Jitsaeng, G. (2018). A study of operational outcomes of dhamma medical volunteerism in Khon Kaen [Unpublished master's thesis]. Mahachulalongkornrajavidyalaya University, Bangkok, Thailand.
- Kampan, A., Sakulku, J., Phothisook, A., & Phutiariyawat, J. (2015). A study of factor analysis of public consciousness of university's students in Bangkok area. *Journal of Social Sciences Srinakharinwirot University*, 18, 299–313.
- Kanchanapee, P., & Jetchamnongnuch, W. (2009). *Development of Kwam-mee-namjai of prothomsuksa five students, Phiboonuppathum School, through learning from live models and symbolic models* [Unpublished master's thesis]. Chulalongkorn University, Bangkok, Thailand.
- Klayluck, P., Chanbanchong, C., Pakdeewong, P., & Konpong, A. (2013). A model of teamwork competency development for educational personnel working in the Office of Primary Education Service Areas. *Journal of Education Naresuan*, *15*(5), 136–145.
- Kleebsuwan, P., & Rotjanalert, N. (2018). Factors contribute to the public mind behaviors of students in Silpakorn University Phetchaburi Information Technology Campus [Unpublished master's thesis]. Silpakorn University, Bangkok, Thailand.
- Makeeree, K., & Rinthaisong, I. (2017). The causal model of civil defense volunteers' public mind of town municipality in Hat Yai District, Songkhla Province. *Academic Services Journal Prince of Songkla University*, 28(2), 97–106.
- Matsushima, R., & Shiomi, K. (2003). Social self-efficacy and interpersonal stress in adolescence. *Social Behavior and Personality*, 31(4), 323–332.
- Ministry of Education Thailand. (2008). *Basic education core curriculum B.E. 2551*. Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission, Ministry of Education.
- Minton, E. A., & Khale, L. R. (2014). *Belief systems, religion, and behavioral economics*. Business Expert Press LLC. Motlagh, S. E., Amrai, K., Yazdani, M. J., Abderahim, H. A., & Sourie, H. (2011). The relationship between self-efficacy and academic achievement in high school students. *Procedia-Social and Behavioral Sciences,* 15, 765–768.
- Nadler, L., & Nadler, Z. (1989). Developing human resources. Jossey-Bass.
- Nakasaney, S., Panjaplinkul, C., & Mo-on, S. (2014). Factors that affected students' public mind behavior, Faculty of Liberal Arts, Rajamangala University of Technology Rattanakosin [Research paper]. Rajamangala University of Technology Rattanakosin.
- Newman, B. M., & Newman, P. R. (2007). Theories of human development. Lawrence Erlbaum Associates.
- Nopphakhun, A., Boonchan, B., & Tungprasert, S. (2017). Teacher competency development in schools under Nakhon Ratchasima Primary Education Service Area Office. *NRRU Community Research Journal*, 12(3), 232–244.
- Office of the National Economic and Social Development Board. (2017). *National economic and social development plan twelfth edition 2017–2021*. Office of the National Economic and Social Development Board, Office of the Prime Minister. https://www.nesdc.go.th/ewt dl link.php?nid=9640
- Perloff, R. M. (2016). The dynamics of persuasion: Communication and attitudes in the twenty-first century. Routledge.

- Pewpet, A., Luanganggoon, N., & Kumpol, B. (2012). The factors that influenced Mattayomsuksa 4 students' public-mindedness in the schools under the Jurisdiction of the basic education commission in the upper northeastern part. *Journal of Educational Measurement Mahasarakham University*, 17(1), 331–342.
- Pongsritasana, J. (2010). Factors affecting public mind of Rajamangala University of Technology Krungthep student *Social Sciences Research and Academic Journal*, *9*(27), 49–62.
- Pratoomthai, B., Turathum, B., & Phumyoo, T. (2018). Public mind in medical school: A comparison of 1st–3rd year medical students at Faculty of Medicine Vajira Hospital. *Vajira Medical Journal: Journal of Urban Medicine*, *62*(4), 327–334.
- Runcharoen, T. (2012). Konlayut kānphatthanā khwāmpen bukkhon hæng kānrīanrū [Learning personnel development strategy]. Khawfang Publisher.
- Saiyot, L., & Saiyot, A. (2010). *Educational research techniques*. Suwiriyasarn.
- Sanamkate, T., & Bhanthumnavin, D. (2016). Psychological characteristics, internal and external familial conditions as correlate of perceived appropriated child-rearing practices in Thai junior high school students. *Journal of Behavioral Science for Development, 8*(1), 163–186.
- Sestapanich, S. (2007). A development of school administrative system for excellence of private school [Unpublished doctoral dissertation]. Chulalongkorn University, Bangkok, Thailand.
- Sin, N. L., Moskowitz, J. T., & Whooley, M. A. (2015). Positive affect and health behaviors across 5 years in patients with coronary heart disease: The heart and soul study. *Psychosomatic Medicine*, 77(9), 1058–1066.
- Snyder, C. R., & Lopez, S. J. (2002). *Handbook of positive psychology*. Oxford University Press.
- Srithong, R. (1999). Human behavior and self-development. Third Wave Education.
- Stoner, A. F., & Wankel, C. (1986). Management. Prentice-Hall.
- Supapoj, N. (2018). Volunteer mind of undergraduate students of Rajabhat Universities in Bangkok Metropolitan Area. *Chandrakasem Rajabhat University Journal of Graduate School, 13*(1), 78–88.
- Sutthirat, C. (2013). Teach children to have public mind. V. Print (1991).
- Suyajai, P. (2013). Adaptation in a crisis of life. Journal of MCU Humanities Periscope, 1(2), 23-32.
- Vinijcharoensri, K. (2016). Luxury value perceptions and attitude toward purchase intention of luxury automobiles in Thailand. *Catalyst*, *13*(2), 46–56.
- Visalo, P. (2011). Kærōi kam sū rōi tham [Trailing Karma to the foot of Dharma]. Nation Books.
- Wang, C. M., Qu, H. Y., & Xu, H. M. (2015). Relationship between social support and self-efficacy in women psychiatrists. *Chinese Nursing Research*, *2*(4), 103–106. https://doi.org/10.1016/j.cnre.2015.10.002Get rights and content
- Wasi, P. (2007). Kānčhatkān khwāmrū krabūankān plotplōi manut sū sakkayaphāp sērīphāp læ khwām suk [Knowledge management process: The process of releasing man to potential, freedom and happiness]. Green-Panyayarn.
- Wongkun, P. (2013). *Tham rat: Chut plīa prathēt Thai?* [Can Dhamma state really solve the problem? Dhamma state-The turning point in Thailand]. The Way of Watch Project.
- Yamwong, P. (2012). A study of social support affect life satisfaction among Thammasat University students [Unpublished master's thesis]. Srinakarinwirot University, Bangkok, Thailand.