Journal of Education and Learning (EduLearn)
Vol. 16, No. 2, May 2022, pp. 164~171
ISSN: 2089-9823 DOI: 10.11591/edulearn.v16i2.20396

The motivation and teaching strategies in pre-service physical education teachers

Singha Tulyakul[1], Amonwan Werathummo[2], Hareesol Khun-inkeeree[3], Witsanu Rotsuwan[4], Ratchaneekorn Reudhabibadh[5]
[1]Department of Health and Physical Education, Faculty of Education, Thaksin University, Songkhla, Thailand
[2]Department of Curriculum and Instruction, Faculty of Education, Thaksin University, Songkhla, Thailand
[3]Faculty of Education, Prince of Songkla University Pattani, Pattani, Thailand
[4]Ban Khao Kaew School, Songkhla, Thailand
[5]Division of Health and Applied Sciences, Faculty of Science, Prince of Songkla University, Songkhla, Thailand

Article Info

Article history:

Received Oct 16, 2021
Revised Apr 15, 2022
Accepted May 30, 2022

Keywords:

Intrinsic motivation
External motivation
Teaching strategies
Physical education

ABSTRACT

Coronavirus disease 2019 (COVID-19) pandemics significantly affect teaching and learning. Especially physical education teaching that emphasizes practice in the field or large space. On the other hand, physical education classes must do online teaching, which leads to students not being interested in learning. This reason affects the teacher's motivation, making most teachers bored to teach without motivation. Specifically, in the pre-service physical educators who have low experience in teaching and leads to unenjoyed in their class. Consequently, pre-service physical educators need to find new strategies to teach students to be of greater interest. Thus, this study examined the relationship between teachers' motivation (intrinsic and external motivation) towards teaching strategies among pre-service physical educators. The instruments were regarding teachers' motivation in terms of intrinsic and external motivation and teaching strategies. The respondents were 157 pre-service physical educators in five universities in the border provinces of Southern Thailand. The result showed that there is a relationship between intrinsic and external motivation towards teaching strategies among the participants. These results provide guidelines for pre-service physical educators to improve their teaching and enhance students' achievement in the future through online physical education classes.

Corresponding Author:

Singha Tulyakul
Department of Health and Physical Education, Faculty of Education, Thaksin University
Kanchanavanich Road, No. 140, Muang, 90000, Songkhla, Thailand
Email: singha@tsu.ac.th

1. INTRODUCTION

In terms of teaching, teachers' motivation is very important to effective teaching [1]. According to van Knippenberg *et al*. [2], motivation can usually influence how the information is processed. Furthermore, as stated by Menges *et al*. [3], motivation will enhance energy and the effort to do things. This is because motivation refers to the inspiration for teaching implies a reason that physical education teachers have for teaching and deciding to teach. It also includes their effort to sustain or persist in teaching [4], [5]. This study focuses on two types of motivation for teaching, namely intrinsic and external motivation only.

External motivation refers to teachers' motivation for teaching to get rewards and praises or avoid punishments. For instance, the teachers perform their task (teaching) to gain extra money. They also avoid unwanted punishments imposed by the school director if they fail to carry out the job [6], [7].

Intrinsic motivation refers to teachers' attentiveness and the pleasure they find [8]. For example, suppose the teacher feels happy during the teaching process and does not desire a prize or any other reward. In that case, his regulation is intrinsic (enjoyment and happiness are the rewards) [9], [10].

However, not only teacher motivation affects teaching effectiveness but also teaching strategies are essential to the teaching and learning process. This is because teaching strategies refer to teachers' ability to choose the appropriate and strategic pedagogical approach to provide students with authentic connections to their content area related to the lesson objectives [11], [12]. Thus, accomplished teachers should utilize effective teaching practices and employ positive behavioral management strategies during classroom experience [13].

Currently, the worldwide are facing the Coronavirus 2019 (COVID-19) pandemic. Report from Worldometers [14], COVID-19 cases on September 28, 2021, in the world around 233,234,938 persons and deaths around 4,772,559 persons. Specifically, in Thailand, COVID-19 cases simultaneously around 1,571,926 persons and deaths around 16,369 cases. As a result, it has affected every aspect, especially in education that cannot be managed under normal teaching and learning and must be taught online only. The previous study found many problems through online teachings, such as insufficient equipment, weak or without Wi-Fi signal, teaching methods or teaching strategies are not interesting via online teaching, and so on [15], [16]. All of these affect the effectiveness of teaching and learning [17], [18].

Moreover, it will be more difficult if a subject that focuses on requires a practical such as physical education (PE) subjects that must be online PE classes [19]. This is because PE class focuses on movement, uses a large area or the stadium as a teaching place [20], [21]. As a result, it affected the teaching effectiveness and low students' achievement. It was, even more, causing problems in PE teaching and learning through online instruction. The issue will increase if a teacher has low teaching experience, such as a pre-service PE teacher. In addition, the pre-service PE teachers will be discouraged and lack motivation for teaching if the students ignore their class [19]. Therefore, good pre-service PE teachers must choose and create the teaching methods or strategies for their students to participate in the PE class and greater interest via online teaching. According to Tulyakul [4], there is a significant positive relationship between motivation for teaching and teaching effectiveness of PE teachers. Then, it is necessary to examine the pre-service PE teacher motivation toward teaching strategies in PE class to improve and develop teaching and learning processes in the future.

The study's objective was to investigate the correlation between intrinsic and external motivation toward PE teaching strategies. The study work around the following hypothesis: i) H_o1: There is no significant relationship between intrinsic motivation and PE teaching strategies; ii) H_o2: There is no significant relationship between external motivation and PE teaching strategies.

2. RESEARCH METHOD

The researcher employed a survey research design because it is deemed most suitable for the field of study. Besides, the researcher considered another factor which is data collection timing [22]. The population in this study involved 157 pre-service PE teachers at five universities in border provinces in Southern Thailand. Additionally, they were doing a practicum in the primary and secondary schools in Southern Thailand as shows in Table 1.

Table 1. The population of the study

Universities	Provinces	Pre-service PE teachers
Thaksin University (TSU)	Songkhla	30 Teachers
Songkhla Rajabhat University (SRU)	Songkhla	30 Teachers
Prince of Songkhla University (PSU) (Pattani Campus)	Pattani	35 Teachers
Yala Rajabhat University (YRU)	Yala	27 Teachers
Thailand National Sport University (TNSU) (Yala Campus)	Yala	35 Teachers
Total 5	3	157

The researcher employed a quantitative research approach to select the needed samples needed for this study. The samples are randomly chosen at the five universities in border provinces in Southern Thailand. This study employed the survey research technique to collect data. Two methods to collect data were used (a self-administered questionnaire and sent by post mail service). In this study, 157 questionnaires were distributed to participants. Out of that, 145 questionnaires (92.35%) were returned and completed. At the same time, 12 questionnaires (7.64%) were not returned. After data screening, four questionnaires

(2.55%) were rejected and only 141 questionnaires (89.8%) were retained for analysis. Table 2 demonstrates the response rate of the questionnaires.

Table 2. The response rate of the questionnaire

Response	Frequency/Rate	Percentage
Distributed questionnaires	157	100%
Returned questionnaires	145	92.35%
Questionnaires not returned	12	7.64%
Incomplete questionnaires	0	0
Rejected due to unreliability	9	5.73%
Retained questionnaires	136	86.62%

The questionnaire adapted from Tulyakul [4] was used to collect data in this study. This questionnaire includes four parts. The first part correlates to the background of the participants for example age, gender, and institution, among others. The second and third parts are related to external and intrinsic motivation, while the last parts were about PE teaching strategies. To examine the quality of the questionnaire, the researcher conducted a pilot test with 30 pre-service PE teachers at Nakhon Si Thammarat Rajabhat University before the actual data collection. Based on the pilot test, the second, third, and last parts had high-reliability values of 0.87, 0.78, and 0.79, respectively. According to Hair *et al*. [23], an acceptable reliability value exceeds 0.70. Thus, this questionnaire can be employed to collect data in the current study.

3. RESULTS AND DISCUSSION

This study's objectives were to examine the relationship between intrinsic and external motivation toward teaching strategies among pre-service PE teachers. In other to achieve the purpose, data were assessed with reference to the measurement model and structural model through the Partial Least Squares-Structural Equation Modeling (PLS-SEM). Moreover, the researcher used the Statistical Package for Social Sciences (SPSS) to examine the Mean and Standard Deviations (S.D.) of the variables and the background of the participants. The raw data were screened before statistical analysis was conducted, and this was done to ensure the accuracy of the data.

After screening data and preliminary analysis, 141 pre-service PE teachers in five universities in border provinces in Southern Thailand were involved in this study. As shown in Table 3, of 141 participants in the present study, 106 are male and 35 are female pre-service PE teachers. Moreover, the data show the background of participants in this study, such as age, religion and university as seen in Table 3.

Table 3. Frequency and percentage of respondents based on gender, age, religion, and name of universities

Profile	Factors	Frequency	Percentage
Gender	Total	141	100 %
	- Male	106	75.2%
	- Female	35	24.8%
Age	Total	141	100%
	- 22	35	24.8%
	- 23	93	66.0%
	- 24	7	5.0%
	- 25	5	3.5%
	- 26	1	0.7%
Religion	Total	141	100%
	- Budish	63	44.7%
	- Islam	77	54.6%
	- Other	1	0.7%
Universities	Total	141	100%
	- Thaksin University (TSU)	29	20.6%
	- Songkhla Rajabhat University (SRU)	30	21.3%
	- Yala Rajabhat University (YRU)	22	15.6%
	- Prince of Songkhla University (PSU)	28	19.9%
	- Thailand National Sport University (TNSU)	32	22.7%

3.1. Assessment of measurement model

This study used the Partial Least Squares-Structural Equation Modeling (PLS-SEM) model to analyze the data. In this procedure, there are two critical steps in analyzing data. The first step to determining

the measured model is validity and reliability as seen in Figure 1, while the second step shows the Structural Equation Model Assessment as seen in Figure 2.

3.1.1. The first step shows the measurement model of the study

There are three variables in this study namely, intrinsic motivation, external motivation, and teaching strategies. This study examined individual item reliability, internal consistency reliability, convergent validity, and discriminant validity to assess the measurement model. Figure 1 presents the measurement model for the current study.

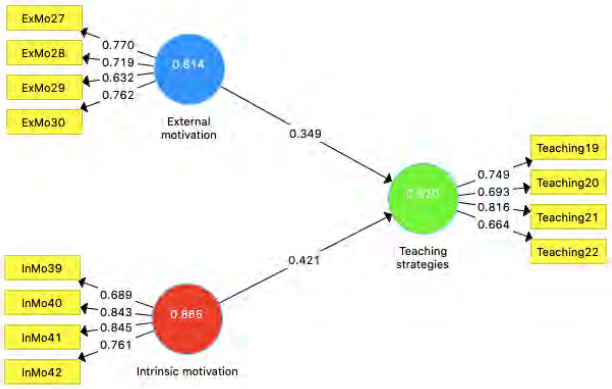

Figure 1. Evaluation of assessment model

3.1.1.1. Analysis result of the assessment model

Following the suggestion given by Hair *et al*. [23] individual item reliability was assessed by determining the loading for each item. Later, the loadings below the threshold of 0.40 were removed. The results show that no item is to be omitted because loadings are between 0.632 and 0.845 as seen in Table 4. Moreover, composite reliability is the appropriate way to assess consistency reliability, and it can be interpreted like a Cronbach's Alpha. In other words, the composite reliability values should be more than 0.7 [23]. The results indicate adequate internal consistency reliability of the measures utilized in this study. In addition, this study determined convergent to assess the average variance extracted (AVE). The AVE value should be at least 0.5 for each variable to be sufficient. Thus, all values of AVE are appropriated in this study.

Table 4. Summary of standardized loading, composite reliability (CR), and average variance extracted (AVE)

Constructs	Indicators	Loading	Composite reliability	Cronbach's alpha	Average variance extracted (AVE)	Convergent validity
Teaching strategies	Teaching 19	0.749	0.822	0.820	0.537	Yes
	Teaching 20	0.693				
	Teaching 21	0.816				
	Teaching 22	0.664				
Intrinsic motivation	InMo39	0.689	0.866	0.865	0.619	Yes
	InMo40	0.843				
	InMo41	0.845				
	InMo42	0.761				
External motivation	ExMo27	0.770	0.813	0.814	0.522	Yes
	ExMo28	0.719				
	ExMo29	0.632				
	ExMo30	0.762				

In this study, discriminant validity was checked by Fornell-Larcker's critation as shown in Table 5. In the Fornell-Larcker's measure, the square roots of average variance extracted (AVE) of each variable shold be more than the correlations among all other variables [23]. Consistent with this criterion, the square roof of AVE of each study variable is higher than the correlations among other variables except the attitude variable (0.723, 0.787 and 0.733).

Table 5. The Fornell-Larcker Criterion Analysis for checking discriminant validity of first-order constructs AVE>r^2 [23]

	External motivation	Intrinsic motivation	Teaching strategies
External motivation	0.723		
Intrinsic motivation	0.618	0.787	
Teaching strategies	0.610	0.638	0.733

Moreover, the Heterotrait Monotrait ratio of correlation (HTMT) is a process for assessing discriminant validity in PLS-SEM, which is one of the key building blocks of model evaluation. If discriminant validity is not established, the researchers cannot be certain whether the results confirming hypothesized structural paths are real or whether they are merely the results of statistical discrepancies. Table 6 shows the Heterotrait Monotrait criterion of correlation (HTMT). Henseler and Fassott [24] stated that the HTMT value of correlation should not be more than 0.85. In this study, the HTMT values are less than 0.85.

Table 6. The heterotrait monotrait (HTMT) criterion for discriminant validity HTMT<0.85 [24]

	External motivation	Intrinsic motivation	Teaching strategies
External motivation	-		
Intrinsic motivation	0.616	-	
Teaching strategies	0.613	0.635	-

3.1.2. The second step shows the structural equation model assessment

The outcomes of the structural model analysis are shown in Figure 2. It meets the criteria of the Evaluation of Assessment Model according to the PLS-SEM analysis procedure with the help of Smart-PLS Version 3.2.7.

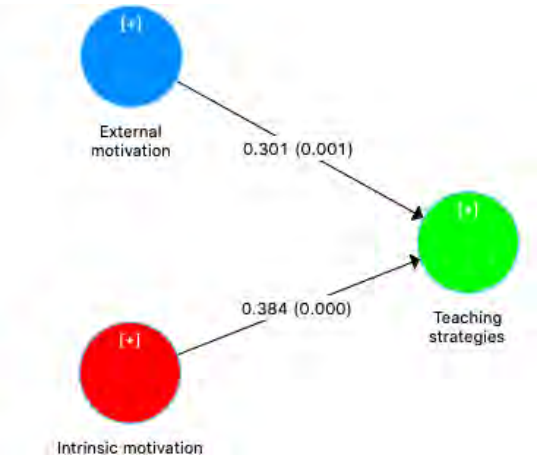

Figure 2. Structural equation model assessment

Based on the figure, Table 7 presents the results of the direct effect hypothesized in this study. The results were from the output of PLS-SEM bootstrapping. Based on this table, the analysis of two hypotheses in this study are: i) H_o1: There is a significant relationship between intrinsic motivation and teaching strategies. (β=.384, T = 4.170, P<.05); ii) H_o2: There is a significant relationship between external motivation and teaching strategies. (β=.301, T=3.408, P>.05).

Table 7. Assessment of significant relationship in first order structural model

Hypothesis	Relationship	Std. Beta (β)	T Values	P Values	Finding
H_o1	Intrinsic motivation-> Teaching strategies	0.384	4.170	0.000*	*Significant
H_o2	External motivation -> Teaching strategies	0.301	3.408	0.001*	*Significant

Note: *p< .05

3.2. Discussion

Based on the first hypotheses, there is a significant relationship between intrinsic motivation and teaching strategies. This is because the pre-service PE teachers feel enjoy and happy when teaching. Thus, they can create or choose the teaching strategies appropriate to their class. According to Filimonov [10], intrinsic motivation refers that when people are motivated intrinsically, incentives and punishments are not necessary because what the teacher provided the rewards for them for example, "When I invest effort in my work as a teacher, I do so because I enjoy finding unique solutions for various students" (enjoys are their rewards). As a result, if pre-service PE teachers have high intrinsic motivation for teaching will affect create and find new teaching strategies for an update in their teaching and learning. Egeberg *et al*. [13] accentuate that accomplished physical education teachers should utilize effective teaching practices for more teaching effectiveness. Furthermore, Garza *et al*. [25] stated that expert teachers ensure students' success by focusing their teachings on students' individual needs and interests. Besides, teachers also display care and concern for each student. Teachers vary their pedagogical approach strategically to provide students with authentic connections to their content area [12]. Consistent with Tulyakul [4] found that motivation for teaching positive relationship with effective teaching of PE teachers in the primary schools of Southern Thailand. Perhaps, enhancing intrinsic motivation for teaching to pre-service PE teachers doing a practicum positive effect greater teaching effectiveness in physical education class.

In addition, the second hypothesis in this study found that there is a significant relationship between external motivation and teaching strategies. Maybe, the pre-service PE teachers need to pass and get a good score in their practicum to graduate. According to Deci and Ryan [8], external motivation in which the motivation that to get the reward, praise, or avoid the punishments when doing something such as "When I invest effort in my work as a teacher, I do so because I do not want the principal to follow my work too closely" (need to avoid the principal too closely). Several recent studies [26], [27] found that external motivation is weak reinforces in the short run but negative reinforcement in the long term. So, supporting the external motivation in pre-service PE teachers should not aim for rewards when teaching. This is because when unforeseen circumstances when the reward is not available the teacher might be demotivated to teach [4]. Even though external motivation is to reinforce in the short run of teaching, the pre-service PE teacher is essential to get rewards, praise, or good results after practicum is finished [28].

4. CONCLUSION

This study investigated the relationship between motivation and teaching strategies in pre-service PE teachers at five universities of Southern Thailand. The results showed a significant relationship between intrinsic motivation and teaching strategies. Also, this study found that there is a significant relationship between external motivation and teaching strategies. As a result, it is important to enhance the motivation for teaching pre-service PE teachers to create or choose new teaching strategies to greater teaching effectiveness in PE classes of the future. A good teacher must have a strong passion for teaching and expert knowledge of physical education pedagogy.

The recommendations in future research should include all universities with a physical education teacher curriculum in Thailand for more wide data and information. In addition, future research should add more variables such as the problems of online teaching and learning, leadership, or job satisfaction of pre-service PE teachers, so that data can be compared with the results from each university.

REFERENCES

[1] L. Pimjan, "The relationship between intrinsic and external motivation towards lesson implementation and application of physical education content among preservice physical education teachers in Thailand," *African Educational Research Journal*, vol. 8, no. 4, pp. 714–720, Oct. 2020, doi: 10.30918/aerj.84.20.154.

[2] D. van Knippenberg, S. R. Giessner, E. Sleebos, and W. P. van Ginkel, "A motivated information processing perspective on the antecedents of empowering leadership," *Journal of Applied Social Psychology*, vol. 51, no. 2, pp. 79–89, Oct. 2021, doi: 10.1111/jasp.12718.

[3] J. I. Menges, D. V Tussing, A. Wihler, and A. M. Grant, "When job performance is all relative: How family motivation energizes effort and compensates for intrinsic motivation," *Academy of Management Journal*, vol. 60, no. 2, pp. 695–719, Apr. 2017, doi: 10.5465/amj.2014.0898.

[4] S. Tulyakul, "Classroom management strategies and motivation for teaching toward teaching effectiveness among physical education teachers in Southern Thailand," Univ. Utara Malaysia, Kedah, Malaysia, 2019.

[5] N. King and L. Bunce, "Academics' perceptions of students' motivation for learning and their own motivation for teaching in a marketized higher education context," *British Journal of Educational Psychology*, vol. 90, no. 3, pp. 790–808, Dec. 2020, doi: 10.1111/bjep.12332.

[6] N. Börü, "The factors affecting teacher-motivation," *International Journal of Instruction*, vol. 11, no. 4, pp. 761–776, Oct. 2018, doi: 10.12973/iji.2018.11448a.

[7] S. Yalçınkaya, G. Dağlı, F. A. Aksal, Z. A. Gazi, and Ü. Kalkan, "The effect of leadership styles and initiative behaviors of school principals on teacher motivation," *Sustainability (Switzerland)*, vol. 13, no. 5, pp. 1–19, Mar. 2021, doi: 10.3390/su13052711.

[8] R. M. Ryan and E. L. Deci, "Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions," *Contemporary Educational Psychology*, vol. 61, p. 101860, Apr. 2020, doi: 10.1016/j.cedpsych.2020.101860.
[9] E. Töre, "Effects of Intrinsic Motivation on Teacher Emotional Labor: Mediating Role of Affective Commitment," *International Journal of Progressive Education*, vol. 16, no. 5, pp. 390–403, Oct. 2020, doi: 10.29329/ijpe.2020.277.24.
[10] D. Filimonov, "Extrinsic Motivation and Incentives," Haaga-Helia UAS - University of Applied Sciences, 2017.
[11] P. Kyrgiridis, V. Derri, K. Emmanouilidou, E. Chlapoutaki, and E. Kioumourtzoglou, "Development of a questionnaire for self-evaluation of teacher effectiveness in physical education (SETEQ-PE)," *Measurement in Physical Education and Exercise Science*, vol. 18, no. 2, pp. 73–90, Feb. 2014, doi: 10.1080/1091367X.2013.866557.
[12] A. Peterson *et al.*, "Understanding innovative pedagogies," no. 172. Organisation for Economic Co-Operation and Development ({OECD}), Mar. 2018, doi: 10.1787/9f843a6e-en.
[13] H. Egeberg, A. McConney, and A. Price, "Classroom management and national professional standards for teachers: A review of the literature on theory and practice," *Australian Journal of Teacher Education*, vol. 41, no. 7, pp. 1–18, Jul. 2016, doi: 10.14221/ajte.2016v41n7.1.
[14] Worldometer, "Coronavirus cases," *Worldometer*, no. 50–51. pp. 109–112, 2020, doi: 10.26439/iusetpraxis2020.n50-51.5049.
[15] C. Coman, L. G. Țîru, L. Meseșan-Schmitz, C. Stanciu, and M. C. Bularca, "Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective," *Sustainability (Switzerland)*, vol. 12, no. 24, pp. 1–22, Dec. 2020, doi: 10.3390/su122410367.
[16] C. Rapanta, L. Botturi, P. Goodyear, L. Guàrdia, and M. Koole, "Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity," *Postdigital Science and Education*, 2020, doi: 10.1007/s42438-020-00155-y.
[17] P. Goldberg, J. Schwerter, T. Seidel, K. Müller, and K. Stürmer, "How does learners' behavior attract preservice teachers' attention during teaching?," *Teaching and Teacher Education*, vol. 97, p. 103213, Jan. 2021, doi: 10.1016/j.tate.2020.103213.
[18] J. H. Stronge, *Qualities of effective teachers*, vol. 40, no. 07. Alexandria, Virginia USA: Association for Supervision and Curriculum Development, 2003.
[19] H. C. Jeong and W. Y. So, "Difficulties of online physical education classes in middle and high school and an efficient operation plan to address them," *International Journal of Environmental Research and Public Health*, vol. 17, no. 19, pp. 1–13, Oct. 2020, doi: 10.3390/ijerph17197279.
[20] J. L. Lund and M. F. Kirk, *Performance-Based Assessment for Middle and High School Physical Education.* Human Kinetics Publishers, 2019.
[21] K. B. Bevans, L. A. Fitzpatrick, B. M. Sanchez, A. W. Riley, and C. Forrest, "Physical Education Resources, Class Management, and Student Physical Activity Levels: A Structure-Process-Outcome Approach to Evaluating Physical Education Effectiveness," *Journal of School Health*, vol. 80, no. 12, pp. 573–580, Nov. 2010, doi: 10.1111/j.1746-1561.2010.00544.x.
[22] J. W. Creswell, "A concise introduction to mixed methods research," in *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, {SAGE} Publications, Inc., 2015, pp. 45–68.
[23] J. F. Hair Jr., G. Thomas, M. Hult, C. M. Ringle, and M. Sarstedt, *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)*. Thousand Oaks: Sage Publications, 2017.
[24] J. Henseler and G. Fassott, "Testing Moderating Effects in PLS Path Models: An Illustration of Available Procedures," in *Handbook of Partial Least Squares*, Springer Berlin Heidelberg, 2010, pp. 713–735.
[25] R. Garza, E. A. Alejandro, T. Blythe, and K. Fite, "Caring for Students: What Teachers Have to Say," *ISRN Education*, vol. 2014, pp. 1–7, Mar. 2014, doi: 10.1155/2014/425856.
[26] L. Legault, "Intrinsic and Extrinsic Motivation," in *Encyclopedia of Personality and Individual Differences*, Springer International Publishing, 2020, pp. 2416–2419.
[27] J. Tranquillo and M. Stecker, "Using intrinsic and extrinsic motivation in continuing professional education," *Surgical Neurology International*, vol. 7, no. 8, pp. S197--S199, 2016, doi: 10.4103/2152-7806.179231.
[28] H. Khun-inkeeree, "Teacher Motivation, Preventive Strategies toward Lesson Implementation in Physical Education Teachers," *Technium Social Sciences Journal*, vol. 19, no. 2668–7798, pp. 144–155, 2021, [Online]. Available: www.techniumscience.com.

BIOGRAPHIES OF AUTHORS

Singha Tulyakul is a Lecturer (Ph.D.) at Department of Health and Physical Education, Faculty of Education, Thaksin University, Songkhla Campus, Thailand. He is interesting and expert in sports, physical education and physical fitness. Inaddition, he expert in research in physical education. He can be contacted at email: singha@tsu.ac.th.

Amonwan Werathummo is a Dean at Faculty of Education and Assistant Professor (Ph.D.) at Department of Curriculum and Instruction, Faculty of Education, Thaksin University, Songkhla Campus, Thailand. She is interesting and expert in Curriculum and Instruction, Research in Childhood. She can be contacted at email: amonwan_w@hotmail.com.

Hareesol Khun-inkeeree is an Assistant Professor (Ph.D.) at School of Languages and General Education, Walailak University, Thailand. She is interesting and expert in Psychology, Educational Psychology and Educational Managemant Research. She can be contacted at email: sol.khun75@gmail.com.

Witsanu Rotsuwan is a Physical Education Teacher (M.A.) at Ban Khao Kaew School, Songkhla Province, Thailand. He is interesting in football, physical education and physical fitness. He can be contacted at email: witsanu_kiw@hotmail.com.

Ratchaneekorn Reudhabibadh is a Doctor of Philosophy in Physiology at Prince of Songkla University, Thailand. She is interesting in Physiological Health and Medical Sciences. She can be contacted at email: Ratchaneekorn.sru@gmail.com.