

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

**Linking teacher emotional support to student engagement in physical education: A university-based perspective**

**Vincular el apoyo emocional del profesorado con la participación del alumnado en educación física: Una perspectiva universitaria**

Ria S. Tanglao

Batangas State University TNEU, Philippines

Corresponding author: [ria.tanglao@g.batstate-u.edu.ph](mailto:ria.tanglao@g.batstate-u.edu.ph)

**Editorial schedule:** Article received 24/05/2025 Accepted: 28/06/2025 Published: 10/01/2025

<https://doi.org/10.17979/sportis.2025.11.4.12130>

**To cite this article use the following reference:**

Tanglao, R.S. (2025). Linking teacher emotional support to student engagement in physical education: A university-based perspective. Sportis Sci J, 11 (3), 1-21  
<https://doi.org/10.17979/sportis.2025.11.4.12130>

**Author's contributions:** The author solely conceptualized, designed, analyzed, and wrote the entirety of this manuscript.

**Funding:** The study did not receive funding.

**Conflicts of interest:** The author declares that there is no conflict of interest.

**Ethical aspects:** The study declares the ethical aspects.

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

## Abstract

This study examined the association between perceived teacher emotional support (TES) and student engagement in physical education (EPE) among undergraduate students from a state university in the Philippines, where limited prior research exists on this relationship. TES was conceptualized through three components: positive climate (PC), teacher's sensitivity (TS), and regard for adult perspective (RAP), each assessed for its individual contribution to engagement in physical activity. A total of 253 students enrolled in general education PE courses participated in the study. Data were gathered using two validated self-report instruments: the Teacher Emotional Support Scale and the Engagement in Physical Education Scale. Confirmatory factor analysis established reliability and construct validity. Multiple regression analysis showed that overall TES significantly predicted EPE,  $R^2 = .394$ ,  $F(3, 249) = 53.894$ ,  $p < .001$ . Among the subcomponents, PC ( $\beta = .354$ ,  $p < .001$ ) and RAP ( $\beta = .105$ ,  $p = .042$ ) were significant predictors, while TS ( $\beta = .076$ ,  $p = .236$ ) was not. These findings highlight the importance of emotionally supportive climates and autonomy-respecting behaviors in promoting student engagement in PE. The results contribute culturally specific insights from Philippine higher education to the broader literature on social-emotional teaching and student motivation. Practical applications for PE instruction are discussed in detail, with implications for teacher training, inclusive pedagogy, and motivation-centered curriculum design.

**Keywords:** teacher emotional support, physical education engagement, self-determination theory, higher education, Philippine context

## Resumen

Este estudio examinó la asociación entre el apoyo emocional docente percibido (TES) y la participación estudiantil en educación física (EPE) entre estudiantes de pregrado de una universidad estatal en Filipinas, donde existe poca investigación previa sobre esta relación. TES se conceptualizó a través de tres componentes: clima positivo (PC), sensibilidad docente (TS) y consideración por la perspectiva adulta (RAP), cada uno evaluado por su contribución individual a la participación en la actividad física. Un total de 253 estudiantes matriculados en cursos de educación física de educación general participaron en el estudio. Los datos se recopilaron utilizando dos instrumentos de autoinforme validados: la Escala de Apoyo Emocional Docente y la Escala de Participación en Educación Física. El análisis factorial confirmatorio estableció la confiabilidad y la validez del constructo. El análisis de regresión múltiple mostró que el TES general predijo significativamente la EPE,  $R^2 = .394$ ,  $F(3, 249) = 53.894$ ,  $p < .001$ . Entre los subcomponentes, el PC ( $\beta = .354$ ,  $p < .001$ ) y el RAP ( $\beta = .105$ ,  $p = .042$ ) fueron predictores significativos, mientras que el TS ( $\beta = .076$ ,  $p = .236$ ) no lo fue. Estos hallazgos resaltan la importancia de los climas de apoyo emocional y las conductas que respetan la autonomía para promover la participación estudiantil en la educación física. Los resultados aportan perspectivas culturalmente específicas de la educación superior filipina a la literatura más amplia sobre la enseñanza socioemocional y la motivación estudiantil. Se discuten en detalle las aplicaciones prácticas para la enseñanza de la educación física, con implicaciones para la formación docente, la pedagogía inclusiva y el diseño curricular centrado en la motivación.

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

**Palabras claves:** apoyo emocional docente, participación en educación física, teoría de la autodeterminación, educación superior, contexto filipino

## Introduction

In the era of growing concerns over sedentary lifestyles and declining physical activity, the role of teachers has emerged as a critical determinant of students' engagement in physical education (Guo et al., 2023). While much attention has been given to curriculum design, facilities, and instructional strategies (Ghayebzadeh et al., 2024; Tsuda et al., 2024; Turner et al., 2017), the affective dimension of the learning environment remains underexplored (Lobo, 2023c). This is particular in the context of higher education in the Philippines. The present investigation is situated within the university setting and focuses on undergraduate students enrolled in general education PE courses. Interpretations are therefore limited to this educational stage and do not extend to primary or secondary PE settings, where developmental and instructional dynamics may differ substantially.

In academic environments where participation in physical activity is often influenced by stress, autonomy and evolving self-regulation, students' motivation to engage cannot be attributed solely to program design or institutional policies. Rather, it is shaped by how learners perceive interpersonal interactions and emotional support within the PE context.

*Teacher emotional support* (TES) encompasses affective teaching behaviors such as warmth, care, sensitivity and responsiveness to student needs (Romano et al., 2021). These behaviors, operationalized through *positive climate*, *teacher sensitivity*, and *regard for adult perspective*, foster psychological safety and strengthen teacher-student relationships (Lobo, 2023b, 2024; Romano et al., 2020). In PE classes, where students are often vulnerable to performance anxiety, peer judgment, or discomfort, emotional support may play a pivotal role in encouraging participation and reducing avoidance behavior (Trigueros et al., 2019).

The theoretical basis of this study is anchored in Self-Determination Theory (Deci & Ryan, 1985), which identifies autonomy, competence, and relatedness as essential psychological needs for fostering intrinsic motivation. In university PE settings, where

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

students are expected to manage their own engagement, TES can function as a contextual enabler of these needs. Emotionally supportive environments may enhance relatedness, boost perceived competence, and promote autonomous engagement in physical activity (Lobo, 2023a; F. Wang et al., 2025). This is particularly relevant in the adult stage, when behavioral regulation becomes more internalized and motivation more self-driven (Dong et al., 2024).

Existing literature affirms that emotionally responsive classrooms promote academic, behavioral, and affective outcomes across disciplines (Jia & Cheng, 2024; Kuo et al., 2024; Prananto et al., 2025). In PE, where learners often grapple with skill disparity, body image concerns and performance expectations, emotionally attuned teachers can create an inclusive climate that encourages effort regardless of athletic ability (Barker et al., 2023; Koka & Hein, 2006). In contrast, emotionally neglectful environments may heighten disengagement or even reinforce long-term aversion to physical activity (Y. Wang et al., 2024).

Despite growing interest in social-emotional learning, there is still a paucity of research linking TES and physical activity engagement in Philippine higher education (Lobo, 2023c; Longakit et al., 2025). Existing studies have primarily focused on motivational climates or feedback style (Warburton, 2017; Zheng et al., 2023), often overlooking the holistic emotional tone of instruction. Moreover, Filipino classrooms are shaped by collectivist values (Aruta et al., 2019), including deference to authority and the prioritization of social harmony (Arrindell, 2003; Triandis, 2018). In such contexts, emotional expression is often indirect and relational rather than overt, which may influence how students interpret teacher affect and support (Markus & Kitayama, 1991; Mesquita & Walker, 2003). These cultural scripts may shape the relational dynamics in physical education settings, where students' willingness to engage may be partially driven by their interpretation of subtle affective cues from teachers.

### ***Research objectives and hypothesis formulation***

This study aimed to examine the relationship between perceived teacher emotional support (TES) and student engagement in physical education (EPE) in a Philippine higher education context. It specifically investigated whether the three

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

subcomponents of TES: positive climate (PC), teacher sensitivity (TS), and regard for adult perspective (RAP), would uniquely contribute to students' engagement. These constructs reflect core aspects of emotionally supportive teaching: fostering a warm and respectful environment (PC), responding to individual needs (TS), and valuing student autonomy and voice (RAP). It is hypothesized that higher perceived levels of TES ( $H_1$ ) and its subcomponents: PC ( $H_{1a}$ ), TS ( $H_{1b}$ ) and RAP ( $H_{1c}$ ) will be positively associated with student engagement in physical activity.

## Methods

### *Participants*

The participants for the study are conveniently selected undergraduate students from a selected state university in the Philippines, particularly in the Region 4A (CALABARZON). These are students from various undergraduate degree programs currently enrolled in Physical Activity Towards Health and Fitness 2 and 4 (PATH-Fit 4) or PE 2/4 during the second semester of the academic year 2024-2025. Therefore, a priori power analysis using G\*Power (version 3.1) indicated that a minimum sample of 119 participants was required to detect a medium effect size ( $f^2 = .15$ ) with 95% power at an alpha level of .05 (Faul et al., 2007), using three predictors in a multiple regression model. A total of 253 college students participated in the study, well exceeding the required minimum. This larger sample size enhances the robustness, precision, and generalizability of the results. The expanded respondent pool also allows for more reliable subgroup analyses and strengthens the overall statistical power beyond the minimum threshold. Of the total sample, 147 (58.1%) were female and 106 (41.9%) were male, reflecting a greater representation of female students.



Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.  
<https://doi.org/10.17979/sportis.2025.11.4.12130>

**Table 1.** Distribution of the respondents of the study

Demographic characteristic	Item	n(%)
Sex	Male	106(41.9%)
	Female	147(58.1%)
	Total	253(100.0%)

Source: Author

## Instruments

There are two distinct instruments that were used in the study. The first part of the survey is the adopted English version of Teacher's Emotional Support Scale (TESS) (Romano et al., 2020). It is a 15-item self-report scale which measured students' perception of the emotional support their physical education instructors provide. It has three components: positive climate, teacher's sensitivity and regard to adult perspective. The data were encoded using 5-point Likert scale from 1- not at all true to 5- very true. Lastly, the newly developed Engagement in Physical Education Scale (EPES) (Stringfellow et al., 2024) was also adopted and utilized. It is an 18-item self-report scale measuring students' engagement in physical education measuring four distinct components: behavioral, cognitive, agentic and emotional engagement. In this study, a composite score was used to determine overall students' engagement in physical activities. The responses are recorded using 5-point Likert scale ranging from 1- strongly disagree to 5- strongly agree.

To evaluate the psychometric properties of the measurement instruments, a confirmatory factor analysis (CFA) was conducted to assess factor loadings, internal consistency, and convergent validity using SmartPLS4. All constructs demonstrated acceptable item loadings, with standardized values exceeding the minimum threshold ( $\geq 0.70$ ) (Hair et al., 2021), supporting adequate indicator reliability. For teacher emotional support, the three subconstructs all showed strong factor loadings ranging from 0.740 to 0.916, with variance inflation factor (VIF) values below the multicollinearity cutoff ( $\leq 5$ ). PC yielded  $CA = 0.872$ ,  $CR = 0.887$ , and  $AVE = 0.726$ , indicating high internal consistency and convergent validity. TS demonstrated excellent reliability and validity as well, with  $CA = 0.907$ ,  $CR = 0.910$ , and  $AVE = 0.728$ . RAP also met convergent validity standards, with  $CA = 0.826$ ,  $CR = 0.869$ , and  $AVE = 0.707$ . Meanwhile, the EPE construct showed satisfactory psychometric properties, with item loadings ranging from 0.700 to

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

0.803, and VIFs from 1.581 to 2.216. Internal consistency was confirmed through CA = 0.889, CR = 0.891, and AVE = 0.600, exceeding recommended thresholds. These results support the construct validity of both instruments and justify their use in the subsequent regression analysis (Hair et al., 2021).

**Table 2.** Confirmatory factor analysis (CFA) to the two distinct instruments used in the study and convergent validity metrics assessment

Construct	Item	Item loadings	VIF
Teacher Emotional Support Positive climate (CA = 0.872, CR = 0.887, AVE = 0.726)	PC1	0.911	3.324
	PC2	0.740	1.649
	PC3	0.916	3.329
	PC5	0.828	2.128
Teacher's sensitivity (CA = 0.907, CR = 0.910, AVE = 0.728)	TS1	0.849	2.765
	TS2	0.889	3.216
	TS3	0.882	3.062
	TS5	0.834	2.431
	TS6	0.812	2.269
Regard to adult perspective (CA = 0.826, CR = 0.869, AVE = 0.707)	RAP1	0.863	2.336
	RAP2	0.842	2.300
	RAP3	0.858	2.032
	RAP4	0.798	1.695
Engagement in Physical Education (CA = 0.889, CR = 0.891, AVE = 0.600)	AG1	0.803	2.216
	AG3	0.776	2.050
	BH1	0.780	2.004
	BH3	0.792	2.145
	CG3	0.700	1.581
	EM1	0.794	2.116
	EM3	0.771	1.921

Source: Author

Note: Item loadings > 0.70, Cronbach's Alpha (CA) and Composite Reliability (CR) > 0.70, AVE (Average Variance Extracted) > 0.50, VIF (Variance Inflation Factor) < 5.0.

Discriminant validity was assessed using two established approaches: the Fornell–Larcker Criterion and the Heterotrait–Monotrait Ratio (Hair et al., 2021). As shown in Table 3, the square roots of the average variance extracted (AVE) are displayed along the diagonal of the Fornell-Larcker matrix. For discriminant validity to be established, each construct's AVE square root must exceed its correlations with other constructs (Fornell & Larcker, 1981). This criterion was satisfied for all constructs: EPE = 0.775, PC = 0.852,

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

TS = 0.854 and RAP = 0.841. In each case, these diagonal values were greater than the corresponding inter-construct correlations, confirming adequate discriminant validity.

All data analyses were conducted using structural equation modeling techniques within a PLS-SEM framework, suitable for examining latent constructs and testing hypothesized associations among variables.

**Table 3.** Discriminant validity metrics assessment

	EPE	PC	RAP	TS
<b>Fornell-Larcker Criterion</b>				
EPE	0.775			
PC	0.669	0.852		
RAP	0.557	0.650	0.841	
TS	0.592	0.731	0.782	0.854
<b>Heterotrait-Monotrait Ratio (HTMT)</b>				
EPE				
PC	0.753			
RAP	0.626	0.738		
TS	0.656	0.820	0.873	

Source: Author

### **Data analysis**

In order to determine the association between teacher's emotional support and engagement in physical education, multiple regression was performed by using SPSS Version 29 of MacOS. It is a statistical technique used to examine the relationship between one dependent variable and two or more independent variables to determine how well the predictors explain or are associated with the outcome. Moreover, in this study, the three components of TES was examined to determine their individual association on EPE.

### **Ethical statement**

This study was conducted in accordance with ethical standards for research involving human participants and complied with the provisions of Republic Act No. 10173, also known as the Data Privacy Act of 2012. The research was exempted from full ethics review by the institutional ethics review board as it posed minimal risk and involved non-invasive procedures. Participation was voluntary, and informed consent was obtained from all respondents via Google Forms. Strict confidentiality and data protection



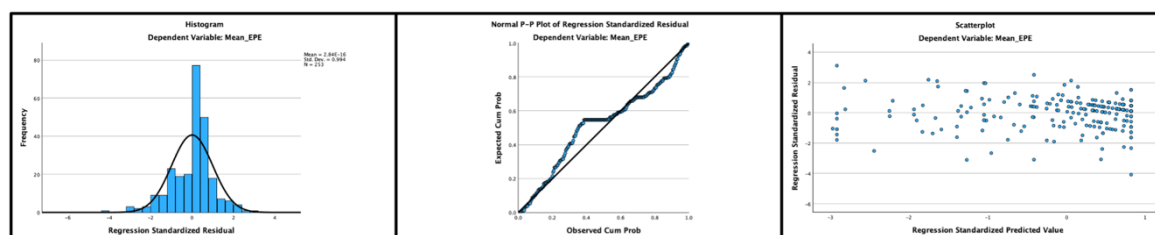
Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

measures were observed throughout the study, and all identifying information was removed from the dataset to ensure complete anonymity.

## Results

All necessary assumptions for multiple regression were assessed prior to analysis. Normality of residuals was confirmed through a histogram and P–P plot, both showing approximate alignment with normal distribution (see Figure 1). Linearity and homoscedasticity were supported by a scatterplot of standardized residuals against predicted values, which displayed a random pattern without evident curvature or funneling (see Figure 1). Multicollinearity was not a concern, with all Variance Inflation Factor (VIF) values below 10 (ranging from 2.151 to 3.174) and Tolerance values above 0.1. Collinearity diagnostics also showed no problematic condition indices, with all condition index values below 30, indicating acceptable multicollinearity levels. Lastly, the Durbin-Watson statistic was 2.015, indicating independence of residuals.



**Figure 1.** Diagnostic plots for regression assumptions: histogram of standardized residuals (left), normal P–P plot (center), and scatterplot of standardized residuals versus predicted values (right).

The results of the multiple regression analysis indicated a statistically significant association between TES and EPE (See Table 4). The model yielded an  $F(3, 249) = 53.894, p < .001$ , and explained 39.4% of the variance in EPE ( $R^2 = .394$ ). These findings support  $H_1$ , suggesting that higher levels of perceived emotional support from teachers are associated with greater student-reported engagement in physical activity during PE classes.

Among the three components of TES, PC demonstrated the strongest association with EPE ( $\beta = .354, t = 5.893, p < .001, 95\% \text{ CI } [.235, .472]$ ). This implies that when

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

students perceive their PE classes as emotionally warm, respectful, and enthusiastic, they tend to report higher levels of engagement in physical activity. The emotional tone fostered by the teacher may play a motivational role in encouraging students to participate more openly and confidently, likely because such environments feel psychologically safe and enjoyable. Therefore, H<sub>1a</sub> has been supported.

RAP also showed a statistically significant, though more modest, association with EPE ( $\beta = .105$ ,  $t = 2.046$ ,  $p = .042$ , 95% CI [.004, .207]). This indicates that students who feel their autonomy is respected and their viewpoints are considered in PE settings are somewhat more likely to engage actively in physical activities. The finding aligns with self-determination theory, where autonomy-supportive environments are linked with greater intrinsic motivation and sustained engagement. Thus, H<sub>1c</sub> has been supported.

On the other hand, TS was not significantly associated with EPE ( $\beta = .076$ ,  $t = 1.188$ ,  $p = .236$ , 95% CI [−.050, .203]) leading to the rejection of Hypothesis H<sub>1b</sub>. Although teacher responsiveness to individual emotional needs is important for overall classroom functioning, it may not independently relate to physical activity engagement in the same way that emotional climate or autonomy support does. It is possible that sensitivity exerts its influence indirectly or under specific emotional conditions not captured in this analysis.

In summary, these findings emphasize that not all forms of emotional support relate equally to physical activity engagement. While the overall emotional support perceived from teachers is associated with higher engagement levels, it appears that positive emotional climate and autonomy-respecting practices are the most salient contributors. Importantly, these associations do not imply causality but do suggest meaningful patterns that warrant further investigation in both observational and intervention-based studies.

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

**Table 4.** Multiple regression analysis between teacher emotional support and engagement in physical education, and hypotheses confirmation

Hypothesis	Regression weights	Beta Coefficient	R <sup>2</sup>	F	t-value	p-value	Decision
H <sub>1</sub>	TES → EPE	-	.394	53.894	-	<.001	Supported
H <sub>1a</sub>	PC → EPE	.354	-	-	5.893	<.001	Supported
H <sub>1b</sub>	TS → EPE	.076	-	-	1.188	.236	Rejected
H <sub>1c</sub>	RAP → EPE	.105	-	-	2.046	.042	Supported

Source: Author

Note: Significance is at  $p < .05$ . The adjusted  $R^2 = .386$  (38.6%).

TES- Teacher emotional support, PC- Positive climate, TS- Teacher's sensitivity, RAP- Regard to adult perspective, EPE- Engagement in Physical Education.

## Discussion

This study examined the association between teacher emotional support and students' engagement in physical education among undergraduate students from a selected state university in the Philippines. The findings revealed that students who perceived higher emotional support from their teachers also reported greater engagement in physical activity, supporting the notion that the emotional climate of the classroom plays a meaningful role in influencing student behavior in PE settings (Leisterer & Jekauc, 2019; Simonton et al., 2022).

The overall regression model indicated that TES was significantly associated with EPE, accounting for 39.4% of the variance. This supports the first hypothesis and aligns with earlier findings emphasizing the influence of affective teacher-student interactions on motivational and behavioral outcomes (Liu et al., 2025; Roorda et al., 2011; Tian & Shen, 2023). While causal conclusions cannot be drawn due to the study's non-experimental design, the results highlight a significant relational pattern between emotional support and student engagement (Prananto et al., 2025) that is especially relevant in physical education contexts.

Among the components of TES, PC emerged as the strongest predictor of EPE. This suggests that students are more likely to be engaged in physical activity when they perceive their learning environment as emotionally warm, respectful, and encouraging (Bertills et al., 2019; Cents-Boonstra et al., 2021; M.-T. Wang et al., 2020). Such findings reinforce previous research demonstrating that a supportive classroom atmosphere contributes to a sense of psychological safety, which is essential for fostering participation

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

(Tu, 2021), especially in physical activities that may expose students to social or performance anxiety.

The study also found that RAP was positively associated with EPE, although the strength of the association was more modest. This supports Hypothesis H<sub>1c</sub> and resonates with Self-Determination Theory (Deci & Ryan, 2015), which emphasizes autonomy as a key driver of intrinsic motivation. When teachers value student opinions, provide choices, and treat learners as capable decision-makers, students may feel more ownership and responsibility over their physical activity participation (Arık & Erturan, 2023; Jankauskiene et al., 2022; Lobo, Masagca, Serrano, Reyes, & Esteban, 2024).

Conversely, TS did not show a statistically significant association with EPE, leading to the rejection of Hypothesis H<sub>1b</sub>. Although responsiveness to individual student needs is generally considered an essential aspect of emotionally supportive teaching, this result suggests that sensitivity alone may not directly influence students' physical activity engagement (Lobo, Masagca, Serrano, Reyes, & Sevilla, 2024). It is possible that in group-based PE settings, where instruction is typically directed at the class rather than individuals, teacher sensitivity may be perceived less frequently or may operate through indirect pathways not captured in this study.

These results underscore that *not all forms of emotional support relate equally to physical activity engagement*, specifically in the case where this study was conducted. While the overall emotional tone and recognition of student voice are meaningfully associated with EPE, the role of TS may depend on contextual factors or interact with other dimensions of classroom support. For physical education teachers, this distinction is important. It suggests that creating a positive emotional environment and fostering student autonomy may be more effective in encouraging participation than focusing solely on individual responsiveness.

The Philippine context further enriches the interpretation of these findings. Conducted in a public university where students are enrolled in general education (minor) PE courses, the study reflects the realities of a population that may not be intrinsically drawn to physical activity but is still required to engage with it. In collectivist cultures like the Philippines, relational harmony and teacher approval are often emphasized (Aruta et al., 2019), making the emotional tone of instruction a particularly salient factor in

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

shaping behavior. This context-specific insight contributes to the limited but growing body of local research that centers affective variables in PE teaching and learning.

Moreover, cultural expectations regarding hierarchy, emotional restraint and indirect communication may influence how Filipino students interpret and respond to emotional support from teachers. In the Philippines, where high power distance and respect for authority are socially ingrained (Arrindell, 2003), students may hesitate to openly express needs or seek help, making subtle cues of support especially impactful. Teachers' emotional presence may be perceived not only through words but through consistency, demeanor, and attentiveness. These culturally mediated interpretations of support should be further explored in future research, as they can shape both the delivery and reception of TES in ways that differ from Western or individualist contexts.

To ensure conceptual precision, the scope of the present study is delimited to physical education as implemented in tertiary-level institutions. Even though the term "physical education" is employed throughout the manuscript, its operationalization specifically refers to general education PE courses in higher education. Given the distinct developmental profiles, curricular goals and instructional approaches in primary and secondary education, the applicability of the present findings to those levels remains limited and requires cautious interpretation.

Although the study offers valuable insights, its limitations must be acknowledged. The use of a cross-sectional, self-report design precludes causal inference and may be subject to response bias. Additionally, the sample was limited to one state university, which may constrain the generalizability of the findings. Future research may benefit from longitudinal or mixed-method approaches to capture the evolving nature of emotional support and engagement over time, or from multi-institutional samples to enhance representativeness. It is also recommended that future studies examine how teacher emotional support operates within elementary and secondary physical education settings, where younger learners may respond differently to affective teacher behaviors due to age-specific developmental and contextual factors.

Moreover, future studies may expand on the present model by introducing psychological need satisfaction (i.e., autonomy, competence, and relatedness) as potential mediators in the relationship between TES and student engagement, in line with the



Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

propositions of Self-Determination Theory. This would allow for a deeper understanding of the motivational mechanisms underlying TES influence. Likewise, while this study utilized composite scores to reflect overall engagement, future investigations may benefit from disaggregating engagement at the subscale level (i.e., behavioral, emotional, cognitive or agentic dimensions) to uncover more nuanced associations with specific facets of teacher emotional support.

In light of these findings, PE teacher training programs should consider integrating modules on emotional climate-building, particularly emphasizing the development of a positive classroom atmosphere and respect for student autonomy. Training should include role-playing and reflective teaching practices that foster warmth, sensitivity and autonomy-supportive communication. For in-service teachers, professional development workshops may emphasize strategies such as providing meaningful choices, acknowledging student perspectives and creating psychologically safe spaces for participation. Curriculum designers and administrators might also embed emotional support indicators within PE teaching standards and evaluation frameworks, recognizing affective pedagogy as essential for promoting engagement and lifelong physical activity habits. These recommendations aim to ensure that emotional support becomes a deliberate and observable component of PE instruction in higher education.

In summary, the study highlights the importance of teacher emotional support in relation to student engagement in physical education. These findings emphasize the affective dimension of teaching as a crucial, if sometimes overlooked, contributor to the physical activity behaviors of university students in the Philippine context.

## Conclusion

This study investigated the association between teacher emotional support (TES) and engagement in physical education among undergraduate students from a selected state university in the Philippines. The findings revealed that TES is significantly associated with student engagement in PE, explaining 39.4% of the variance. Among the components of TES, PC and RAP were both positively associated with EPE, while TS was not found to be significantly linked.



Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

These results emphasize that the emotional and relational dynamics fostered by PE teachers, particularly the classroom climate and respect for student autonomy, play a meaningful role in shaping students' willingness to participate in physical activity within the higher education context. The findings are not intended to generalize to earlier stages of education, where developmental needs, instructional structures and pedagogical frameworks differ significantly.

### **Significance of the study**

The significance of this study lies in its contribution to the limited empirical research on the psychosocial determinants of physical activity engagement in the Philippine higher education context. By specifically focusing on the emotional support provided by teachers, the study expands the discussion beyond traditional instructional strategies and sheds light on the affective dimensions of PE instruction, which are often undervalued in curriculum development and teacher training programs. The results support the notion that students' emotional experiences in PE settings are integral to their motivation and participation, offering evidence-based guidance for more holistic and inclusive PE pedagogies. Furthermore, the study contributes to the growing advocacy for integrating social-emotional learning (SEL) into physical education practice. It reinforces the value of equipping PE teachers with relational and affective teaching competencies, not only for classroom management or rapport-building but also for promoting student engagement in health-enhancing physical activity.

### **Importance of Philippine-based studies in the global discourse**

This research also underscores the importance of Philippine-based studies in advancing the global discourse on physical education and sport pedagogy. Much of the existing literature on teacher emotional support and student engagement originates from Western contexts, where cultural values, educational systems, and student-teacher dynamics differ markedly from those in Southeast Asia. By situating this study within the socio-cultural and institutional realities of a Philippine state university, it provides context-specific insights that challenge the one-size-fits-all assumptions of global models. In collectivist societies such as the Philippines, emotional support from teachers may have

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

unique implications for student engagement. Including such perspectives not only enriches the theoretical diversity of global PE literature but also contributes to the decolonization of research, ensuring that educational policies and practices are responsive to local values and learner realities. As such, this study serves as a foundational step toward building a more inclusive and representative body of knowledge in international physical education scholarship.

## References

- Arik, A., & Erturan, A. G. (2023). Autonomy Support and Motivation in Physical Education: A Comparison of Teacher and Student Perspectives. *International Journal of Contemporary Educational Research*, 10(3), 649–657. <https://doi.org/10.52380/ijcer.2023.10.3.470>
- Arrindell, W. A. (2003). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations. *Behaviour Research and Therapy*, 41(7), 861–862. [https://doi.org/10.1016/S0005-7967\(02\)00184-5](https://doi.org/10.1016/S0005-7967(02)00184-5)
- Aruta, J. J. B. R., Barretto, I. D. E., Shin, Y., & Jang, A. (2019). The Experience of Power in Teacher–Student Relationships in Collectivistic Context. *Psychological Studies*, 64(3), 316–331. <https://doi.org/10.1007/s12646-019-00523-0>
- Barker, D., Varea, V., Bergentoft, H., & Schubring, A. (2023). Body image in physical education: A narrative review. *Sport, Education and Society*, 28(7), 824–841. <https://doi.org/10.1080/13573322.2022.2076665>
- Bertills, K., Granlund, M., & Augustine, L. (2019). Inclusive Teaching Skills and Student Engagement in Physical Education. *Frontiers in Education*, 4. <https://doi.org/10.3389/feduc.2019.00074>
- Cents-Boonstra, M., Lichtwarck-Aschoff, A., Denessen, E., Aelterman, N., & Haerens, L. (2021). Fostering student engagement with motivating teaching: An observation study of teacher and student behaviours. *Research Papers in Education*, 36(6), 754–779. <https://doi.org/10.1080/02671522.2020.1767184>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer US. <https://doi.org/10.1007/978-1-4899-2271-7>

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

- Deci, E. L., & Ryan, R. M. (2015). Self-Determination Theory. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 486–491). Elsevier.  
<https://doi.org/10.1016/B978-0-08-097086-8.26036-4>
- Dong, W., Xiang, C., Kamaruddin, A. Y., Ali, S. K. S., Yang, Z., & Wang, X. (2024). The relationship between perceived teacher relatedness-support behavior (RSB) and learning motivation of dancesport students in universities. *Scientific Reports*, 14(1), 28043. <https://doi.org/10.1038/s41598-024-79507-8>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191.  
<https://doi.org/10.3758/bf03193146>
- Ghayebzadeh, S., Zardoshtian, S., Da Silva, C. A. F., Tarajian, M., & Sortwell, A. (2024). Ten Tips for Designing Effective Physical Education Programs in Schools. *Journal of Physical Education, Recreation & Dance*, 95(7), 54–56.  
<https://doi.org/10.1080/07303084.2024.2373005>
- Guo, Q., Samsudin, S., Yang, X., Gao, J., Ramlan, M. A., Abdullah, B., & Farizan, N. H. (2023). Relationship between Perceived Teacher Support and Student Engagement in Physical Education: A Systematic Review. *Sustainability*, 15(7), 6039–6039.  
<https://doi.org/10.3390/su15076039>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-80519-7>
- Jankauskiene, R., Urmanavicius, D., & Baceviciene, M. (2022). Associations between Perceived Teacher Autonomy Support, Self-Determined Motivation, Physical Activity Habits and Non-Participation in Physical Education in a Sample of Lithuanian Adolescents. *Behavioral Sciences*, 12(9), 314.  
<https://doi.org/10.3390/bs12090314>
- Jia, M., & Cheng, J. (2024). Effect of teacher social support on students' emotions and learning engagement: A U.S.-Chinese classroom investigation. *Humanities and*

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

*Social Sciences Communications*, 11(1), 158. <https://doi.org/10.1057/s41599-024-02634-0>

- Koka, A., & Hein, V. (2006). Perceptions of teachers' positive feedback and perceived threat to sense of self in physical education: A longitudinal study. *European Physical Education Review*, 12(2), 165–179. <https://doi.org/10.1177/1356336X06065180>
- Kuo, Y.-K., Batool, S., Devi, S., Tahir, T., & Yu, J. (2024). Exploring the impact of emotionalized learning experiences on the affective domain: A comprehensive analysis. *Heliyon*, 10(1), e23263. <https://doi.org/10.1016/j.heliyon.2023.e23263>
- Leisterer, S., & Jekauc, D. (2019). Students' Emotional Experience in Physical Education—A Qualitative Study for New Theoretical Insights. *Sports*, 7(1), 10–10. <https://doi.org/10.3390/sports7010010>
- Liu, J., Gao, J., & Arshad, M. H. (2025). Teacher-student relationships as a pathway to sustainable learning: Psychological insights on motivation and self-efficacy. *Acta Psychologica*, 254, 104788. <https://doi.org/10.1016/j.actpsy.2025.104788>
- Lobo, J. (2023a). Instructor Emotional Support, Academic Resiliency, and School Engagement in an Online Learning Setting during Covid-19 Pandemic. *Journal of Learning for Development*, 10(2), 252–266. <https://doi.org/10.56059/jl4d.v10i2.826>
- Lobo, J. (2023b). Perceived Physical Education Teachers' Emotional Support and its direct interrelation to Learners' Academic Resilience. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 9(3), 527–544. <https://doi.org/10.17979/sportis.2023.9.3.9797>
- Lobo, J. (2023c). Teacher Emotional Support and School Engagement: The case of Physical Education Teachers and Students in a Prominent Local College. *Physical Culture and Sport. Studies and Research*, 98(1), 57–66. <https://doi.org/10.2478/pcssr-2023-0005>
- Lobo, J. (2024). Perceived instructor's emotional support and its mediating effect to students' academic resilience and study engagement: In the case of a higher education institution in the Philippines. *Interpersona: An International Journal on Personal Relationships*, 18(2), 238–264. <https://doi.org/10.5964/ijpr.10549>

Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

Lobo, J., Masagca, R. C., Serrano, J. M., Reyes, G. J., & Sevilla, B. (2024). Can Physical Education professors emotionally motivate students to practice healthy living? Investigating the direct influence of Perceived Professor's Emotional Support on Sedentary Lifestyle Behavior. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 11(1), 1–20.

<https://doi.org/10.17979/sportis.2025.11.1.11066>

Lobo, J., Masagca, R. C., Serrano, J. M., Reyes, J., & Esteban, M. J. (2024). Perceived Physical Education Instructor's Autonomy Support to Students' University Engagement: Deciphering an unexplored issue in the case of a State University in the Philippines: *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 10(3), 437–463.

<https://doi.org/10.17979/sportis.2024.10.3.10642>

Longakit, J., Lobo, J., Gazali, N., Toring-Aque, L., Sayson, M., Aque Jr., F., Panganiban, T., Tagare Jr., R. L., Garcia Jr., A. L., Aquino, J. M. D., Sinag, J. M. D., & Celestial, E. F. (2025). The influence of teacher emotional support on academic engagement of university students: Examining the mediating role of academic motivation through the lens of Self-determination theory. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 11(2), 1–25.

<https://doi.org/10.17979/sportis.2025.11.2.11328>

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253.

<https://doi.org/10.1037/0033-295X.98.2.224>

Mesquita, B., & Walker, R. (2003). Cultural differences in emotions: A context for interpreting emotional experiences. *Behaviour Research and Therapy*, 41(7), 777–793. [https://doi.org/10.1016/S0005-7967\(02\)00189-4](https://doi.org/10.1016/S0005-7967(02)00189-4)

Prananto, K., Cahyadi, S., Lubis, F. Y., & Hinduan, Z. R. (2025). Perceived teacher support and student engagement among higher education students – a systematic literature review. *BMC Psychology*, 13(1), 112. <https://doi.org/10.1186/s40359-025-02412-w>

Romano, L., Angelini, G., Consiglio, P., & Fiorilli, C. (2021). Academic Resilience and Engagement in High School Students: The Mediating Role of Perceived Teacher



Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

Emotional Support. *European Journal of Investigation in Health, Psychology and Education*, 11(2), 334–344. <https://doi.org/10.3390/ejihpe11020025>

Romano, L., Buonomo, I., Callea, A., Fiorilli, C., & Schenke, K. (2020). Teacher Emotional Support Scale on Italian High School Students: A Contribution to the Validation. *The Open Psychology Journal*, 13(1), 123–132. <https://doi.org/10.2174/1874350102013010123>

Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The Influence of Affective Teacher–Student Relationships on Students’ School Engagement and Achievement: A Meta-Analytic Approach. *Review of Educational Research*, 81(4), 493–529. <https://doi.org/10.3102/0034654311421793>

Simonton, K. L., Garn, A. C., & Washburn, N. (2022). Caring Climate, Emotions, and Engagement in High School Physical Education. *Journal of Teaching in Physical Education*, 41(3), 401–410. <https://doi.org/10.1123/jtpe.2021-0086>

Stringfellow, A., Wang, C., Farias, C. F. G., & Hastie, P. A. (2024). The development of an “Engagement in Physical Education” scale. *Frontiers in Sports and Active Living*, 6, 1460267. <https://doi.org/10.3389/fspor.2024.1460267>

Tian, L., & Shen, J. (2023). The effect of perceived teachers’ interpersonal behavior on students’ learning in physical education: A systematic review. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1233556>

Triandis, H. C. (2018). *Individualism and Collectivism* (1st ed.). Routledge. <https://doi.org/10.4324/9780429499845>

Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., López-Liria, R., & Álvarez, J. F. (2019). Influence of Physical Education Teachers on Motivation, Embarrassment and the Intention of Being Physically Active During Adolescence. *International Journal of Environmental Research and Public Health*, 16(13), 2295. <https://doi.org/10.3390/ijerph16132295>

Tsuda, E., Ward, P., Hastie, P., Ko, B., Santiago, J. A., Kim, I., Kim, J., & Ressler, J. D. (2024). Strategies for the Teaching of Content Courses in Physical Education Teacher Education. *Journal of Physical Education, Recreation & Dance*, 95(6), 20–25. <https://doi.org/10.1080/07303084.2024.2355869>



Original article. Linking teacher emotional support to student engagement in physical education: A university-based perspective. Vol. 11, n.º 4; p. 1-21, October 2025.

<https://doi.org/10.17979/sportis.2025.11.4.12130>

- Tu, X. (2021). The Role of Classroom Culture and Psychological Safety in EFL Students' Engagement. *Frontiers in Psychology*, 12, 760903. <https://doi.org/10.3389/fpsyg.2021.760903>
- Turner, L., Johnson, T. G., Calvert, H. G., & Chaloupka, F. J. (2017). Stretched too thin? The relationship between insufficient resource allocation and physical education instructional time and assessment practices. *Teaching and Teacher Education*, 68, 210–219. <https://doi.org/10.1016/j.tate.2017.09.007>
- Wang, F., Zeng, L. M., & King, R. B. (2025). Teacher support for basic needs is associated with socio-emotional skills: A self-determination theory perspective. *Social Psychology of Education*, 28(1), 76. <https://doi.org/10.1007/s11218-024-10009-1>
- Wang, M.-T., L. Degol, J., Amemiya, J., Parr, A., & Guo, J. (2020). Classroom climate and children's academic and psychological wellbeing: A systematic review and meta-analysis. *Developmental Review*, 57, 100912. <https://doi.org/10.1016/j.dr.2020.100912>
- Wang, Y., Tian, J., & Yang, Q. (2024). The chain-mediating effects of negative physical sensation and experiential avoidance on exercise anxiety in college students. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1465424>
- Warburton, V. E. (2017). Peer and teacher influences on the motivational climate in physical education: A longitudinal perspective on achievement goal adoption. *Contemporary Educational Psychology*, 51, 303–314. <https://doi.org/10.1016/j.cedpsych.2017.08.001>
- Zheng, S., Ji, X., Cheng, L., Xu, J., & Cronin, L. D. (2023). Perceptions of the motivational climate, basic psychological needs, and life skills development in Chinese physical education students. *Frontiers in Psychology*, 14, 1232849. <https://doi.org/10.3389/fpsyg.2023.1232849>