Sportis
Revista Técnico-Científica del Deporte Escolar, Educación Física y Psicomotricidad
Scientific Technical Journal of School Sport, Physical Education and Psychomotricity

Editor: University of A Coruña. A Coruña. Spain
ISSN-e 2386-8333
E-mail: sportis.journal@udc.es Web: https://revistas.udc.es

Original article. 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. Vol. 11, n.º 1; p. 1-20, January 2025. https://doi.org/10.17979/sportis.2025.11.1.11066

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

¿Pueden los profesores de Educación Física motivar emocionalmente a los estudiantes para que practiquen una vida saludable? Investigación de la influencia directa del apoyo emocional percibido por el profesor en el comportamiento de estilo de vida sedentario

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Editorial Schedule: *Article received 07/15/2024 Accepted: 10/29/2024 Published: 01/01/2025*
https://doi.org/10.17979/sportis.2025.11.1.11066

To cite this article use the following reference:
Lobo, J.; Masagca, R.C.E.; Serrano, J.M.A.; Reyes, G.D.; Sevilla, B.G. (2025). 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 Sci J, 11 (1), 1-20 https://doi.org/10.17979/sportis.2025.11.1.11066

Author contribution: All authors contributed equally to the work.

Funding: The study did not obtain funding.

Conflict of interest: The authors declare that they have no conflict of any kind

Ethical aspects: The study declares the ethical aspects.

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Abstract

Perceived emotional support from professors is a well-documented factor influencing students' motivation, participation, perseverance, and well-being. However, its influence on students' sedentary lifestyle behaviors remains underexplored. This study assessed the direct influence of perceived professor's emotional support on the sedentary lifestyle behaviors of undergraduate students at a state university in the Philippines. Utilizing a multiple regression approach, this study analyzed data collected from 1,128 purposively selected selected students through an online survey conducted from January to February 2024. The survey included the Sedentary Behavior Questionnaire and the Teacher's Emotional Support Scale. Results indicate that perceived professor's emotional support significantly predicts students' sedentary behaviors during weekdays [$F(3, 1124) = 3.104$, $p = .026$] and weekends [$F(3, 1124) = 4.837$, $p = .002$]. Professor's sensitivity and regard to adult perspective were significant predictors of reduced sedentary behavior, whereas positive climate was not. Specifically, Professor's Sensitivity ($\beta = -.189$, $p = .012$) and Regard to adult perspective ($\beta = .201$, $p < .001$) influenced weekday behaviors, while Professor's Sensitivity ($\beta = -.295$, $p < .001$) and regard to adult perspective ($\beta = .218$, $p = .005$) influenced weekend behaviors. The study concludes that professor's emotional support plays a crucial role in mitigating sedentary behaviors among students. These findings underscore the importance of professor-student relationships extending beyond academics to foster healthier lifestyle choices. Further research is recommended to explore the underlying mechanisms and contextual factors affecting this relationship, aiming to develop targeted interventions and policies that enhance both academic performance and physical well-being, thus fostering supportive learning environments.

Keywords: higher education, professor's emotional support, physical education, sedentary lifestyle behaviors.

Resumen

El apoyo emocional percibido de los profesores es un factor bien documentado que influye en la motivación, la participación, la perseverancia y el bienestar de los estudiantes. Sin embargo, su influencia en los comportamientos de estilo de vida sedentario de los estudiantes sigue siendo poco explorada. Este estudio evaluó la influencia directa del apoyo emocional percibido del profesor en los comportamientos de estilo de vida sedentario de los estudiantes universitarios en una universidad estatal en Filipinas. Utilizando un enfoque de regresión múltiple, este estudio analizó los datos recopilados de 1.128 estudiantes seleccionados al azar a través de una encuesta en línea realizada de enero a febrero de 2024. La encuesta incluyó el cuestionario de comportamiento sedentario y la Escala de apoyo emocional del profesor. Los resultados indican que el apoyo emocional percibido del profesor predice significativamente los comportamientos sedentarios de los estudiantes durante los días de semana [F(3, 1124) = 3,104, p = .026] y los fines de semana [F(3, 1124) = 4,837, p = .002]. La sensibilidad del profesor y la consideración de la perspectiva de los adultos fueron predictores significativos de la reducción del comportamiento sedentario, mientras que el clima positivo no lo fue. En concreto, la sensibilidad del profesor (β = -.189, p = .012) y la consideración de la perspectiva de los adultos (β = .201, p < .001) influyeron en los

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comportamientos de los días laborables, mientras que la sensibilidad del profesor (β = -.295, p < .001) y la consideración de la perspectiva de los adultos (β = .218, p = .005) influyeron en los comportamientos de los fines de semana. El estudio concluye que el apoyo emocional del profesor desempeña un papel crucial en la mitigación de los comportamientos sedentarios entre los estudiantes. Estos hallazgos subrayan la importancia de que las relaciones profesor-alumno se extiendan más allá de lo académico para fomentar opciones de estilo de vida más saludables. Se recomienda realizar más investigaciones para explorar los mecanismos subyacentes y los factores contextuales que afectan a esta relación, con el objetivo de desarrollar intervenciones y políticas específicas que mejoren tanto el rendimiento académico como el bienestar físico, fomentando así entornos de aprendizaje de apoyo.

Palabras claves: educación superior, apoyo emocional del profesor, educación física, conductas sedentarias.

Introduction

Perceived professor's emotional support is the subjective perception students have about the care, understanding, and encouragement they receive from their professors in academic environments. This structure highlights how students perceive their relationships with professors in relation to emotional connection, empathy, and support (Wang, 2023). It refers to students' perceptions of how accessible, attentive, and empathetic their professors are towards their emotional well-being, in addition to academic teaching. Additionally, students' perception of a professor's emotional support indicates their evaluation of the emotional atmosphere in the classroom and the strength of their bond with their professor (Hoferichter et al., 2022). This perception can significantly impact their academic involvement, mental health, and socio-emotional growth (Schenke et al., 2018).

Self-Determination Theory (SDT) by Deci and Ryan (1985) offers a structure for comprehending how a student's perception of a professor's emotional support might influence their motivation and involvement. SDT posits that persons possess three fundamental psychological needs: autonomy, competence, and relatedness. When these needs are met, students are more inclined to feel intrinsic drive, participate in activities voluntarily, and show increased perseverance and well-being. Studies on perceived professor's emotional support have emphasized its significance in promoting positive student results in several areas. Research indicates that students who feel significant emotional support from their professors tend to exhibit increased academic motivation,

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contentment, and achievement (Lobo, 2023b). Moreover, perceived emotional support from professors is associated with improved socio-emotional skills such as increased self-esteem, self-efficacy, and resilience when dealing with difficulties (Cooper et al., 2023). Students who receive emotional support from their professors demonstrate less behavioral issues, improved psychological well-being, and enhanced peer relationships (Chen et al., 2024), fostering a happy and productive learning atmosphere. The idea of perceived professor's emotional support emphasizes the importance of the professor-student relationship in influencing students' academic experiences and well-being. It highlights the importance of students serving not only as professors but also as emotional nurturers who create a supportive environment for students to flourish. It is crucial to acknowledge and tend to students' emotional needs and cultivate strong professor-student connections to support comprehensive development and establish inclusive and encouraging educational settings that enhance optimal learning and development for each student. According to Romano et al. (2020), Professor's (teacher) emotional support is divided into three dimensions, *positive climate, professor's sensitivity* and *regard to adult perspective*.

Firstly, *Positive Climate* is when professors create a positive atmosphere that fosters a compassionate and helpful learning environment, making students feel appreciated, respected, and empowered to succeed (Pangle, 2022). Professors who create a positive climate build strong interpersonal ties with students by showing warmth, empathy, and encouragement in their interactions. The positive environment is defined by transparent communication, reciprocal trust, and a feeling of inclusion, allowing students to feel secure in expressing themselves, taking chances, and participating in valuable learning opportunities (Brinia et al., 2022). Professors are crucial in establishing a classroom environment that values diversity, encourages teamwork, and prioritizes a growth mindset to support students' academic and social-emotional progress (Lobo, 2023a). In this environment, students are more inclined to be motivated, involved, and connected to their studies, decreasing the chances of inactive habits linked to disinterest or loneliness. Furthermore, *Professor's sensitivity* refers to an professor's ability to be aware and responsive to the unique requirements, feelings, and backgrounds of their students (Chen et al., 2020). A compassionate professor shows

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empathy, understanding, and responsiveness to students varied backgrounds, learning styles, and socio-emotional difficulties (Zhang, 2022). Professors are adept at discerning small indications and signals from students, adjusting their teaching methods and interactions to offer suitable assistance and motivation (Aldrup et al., 2020). This sensitivity promotes validation and trust in the professor-student connection, enabling students to feel acknowledged, listened to, and appreciated in the educational setting. Professors foster a supportive environment by being sensitive, allowing students to participate actively in the learning process, which helps in achieving positive outcomes and reducing sedentary behaviors linked to disengagement or emotional distress. Moreover, *Regard to Adult Perspective* is considering the adult viewpoint requires professors to have a sophisticated comprehension of the distinct developmental phase, encounters, and viewpoints of their adult students (Vattøy & Gamlem, 2019). It involves acknowledging and valuing adults as individuals experiencing substantial physical, cognitive, emotional, and social transformations, each with unique strengths, difficulties, and preferences. professors that show respect for the adolescents' viewpoint recognize the significance of autonomy, identity exploration, and peer interactions in adolescents' lives, creating room for self-expression, choice, and independence in the educational setting (Hashmi & Fayyaz, 2022). Professors can establish a more accessible and interactive atmosphere in the classroom by appreciating adolescents' viewpoints, interests, and real-life encounters (Verhoeven et al., 2019). This approach affirms students' identities, encourages meaningful connections, and boosts active involvement in learning activities.

Meanwhile, college students with a sedentary lifestyle exhibit lengthy periods of sitting or low physical activity levels throughout the day, generally engaging in activities with minimum energy expenditure (Garn & Simonton, 2023). This sedentary behavior includes sitting for extended durations during tasks like studying, using electronic devices, watching television, or participating in passive leisure activities. A sedentary lifestyle is more than just physical inactivity; it entails prolonged periods of immobility and is linked to adverse health effects such as higher chances of obesity, heart disease, metabolic diseases, and mental health problems in students (Daniele et al., 2022). Numerous studies have emphasized the common occurrence and harmful

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impacts of sedentary behavior among students in contemporary society (Schembri et al., 2023). Many students spend a considerable amount of time engaged in sedentary activities due to the prevalence of technological gadgets and the need for extended periods of sitting during academic and recreational tasks. Sedentary behavior is linked to negative health effects regardless of physical activity levels, which highlights it as a major public health issue (Yang et al., 2022). Extended periods of inactivity can lead to physical health issues and impact students' cognitive abilities, academic achievements, and emotional health. This emphasizes the importance of implementing strategies to decrease sedentary behavior and encourage better habits among students. Initiatives to address sedentary behavior in students usually employ comprehensive strategies that focus on many aspects such as environmental, social, and individual influences (Keadle et al., 2017). Interventions may involve fostering active learning environments in schools, integrating physical activity breaks during class time, promoting involvement in extracurricular sports and recreational activities, and educating students and parents on the significance of decreasing sedentary time and embracing healthy habits (Neil-Sztramko et al., 2021).

The association between students' sedentary lifestyle habit and their perception of professor's emotional support is a topic gaining attention in educational and health studies (Tian & Shen, 2023). Existing literature mostly examines the influence of professor support on academic performance and socio-emotional health. However, recent evidence indicates a possible connection between students' sedentary activities and their perception of emotional support from professors (Ruzek et al., 2016). Professor's emotional support can impact students' sedentary behavior indirectly by affecting their well-being and motivation (Zheng, 2022). Students who receive significant emotional support from their professors tend to have a stronger connection to their school, reduced stress levels, and improved self-esteem and motivation (Hoferichter et al., 2022). Positive socio-emotional outcomes can decrease the probability of resorting to sedentary behaviors as a way to cope with stress or unpleasant feelings. Students who receive emotional support from their professor are more likely to engage in school-based physical activities and extracurricular programs, potentially lowering inactive time outside of class. Indeed, perceived professor's

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emotional support can affect students' attitudes and beliefs on health and well-being, such as the significance of consistent physical activity and decreasing sedentary behaviors (Guo et al., 2023). Professors that exhibit caring, empathy, and encouragement towards their students can act as positive examples (Xie & Derakhshan, 2021) for healthy behaviors, which can impact students' lifestyle decisions. On the other hand, if students feel that professors do not provide emotional support, it could lead to disengagement, alienation, or stress (Hascher & Hagenauer, 2010).

Therefore, the objective of this study is to investigate the direct relationship of students' perceived professor's emotional support to their sedentary lifestyle behavior during both weekdays and weekends within the Higher Education Institution setting, from a selected State University in the Philippines. Given the limited research conducted on this topic within the Philippine context, this study aims to fill this gap in the literature and provide valuable insights into the role of professor support in shaping students' sedentary behaviors in higher education settings. In this regard, this study is focused on testing the following hypotheses:

H_1: Perceived PES has no direct influence to SLB (Weekdays);

H_{1a}: PC has no direct influence to SLB (Weekdays);

H_{1b}: PS has no direct influence to SLB (Weekdays);

H_{1c}: RAP has no direct influence to SLB (Weekdays);

H_2: Perceived PES has no direct influence to SLB (Weekends);

H_{2a}: PC has no direct influence to SLB (Weekends);

H_{2b}: PS has no direct influence to SLB (Weekdays);

H_{2c}: RAP has no direct influence to SLB (Weekdays);

Methods

Participants and Sampling Technique

The study focused on first- and second-year undergraduate students enrolled in the 2nd Semester of the Academic Year 2023-2024 at Bulacan State University, Malolos City, Bulacan. This is due to minor physical education classes being offered only to these year levels. *Purposive sampling* was used to select respondents deliberately based

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on specific criteria to address the research objectives effectively. Subsequently, the specified attributes will be used to choose the participants for the study:

1. First- or second-year students currently enrolled in Physical Education 2 (PATH-Fit 2) and Physical Education 4 (PATH-Fit 4) during the 2nd Semester, Academic Year 2023-2024 at Bulacan State University; and,
2. Across all spectrums of gender.

The total population of students of first- and second-year students currently enrolled in Physical Education 2 and Physical Education 4 at the university is 6,000. In this regard, the present study have utilized the *Raosoft Sample Size Calculator* to determine the exact sample size needed to ensures statistical power and precision (CF: 95%, MOE: 5%). Interestingly, the online survey was completed by 1,244 students. Following the data cleansing process, a final count of 1,128 responses was obtained, representing a response rate of 99.6%. Table 1 illustrates the distribution of respondents' demographic profiles based on gender and year level from a total sample of one thousand one hundred twenty-eight (1128) undergraduate students. Based on the table, it was observed that most of the respondents are female [$N_{\text{Female}} = 633(56.12\%)$] which are mostly 1st year students [$N_{\text{Female}} = 599(59.60\%)$], while male respondents [$N_{\text{Male}} = 404(35.82\%)$] are mostly 1st year [$N_{\text{Male}} = 321(31.94\%)$]. Additionally, LGBTQIAP+ respondents [$N_{\text{LGBTQIAP+}} = 67(5.94\%)$] and those respondents who prefer not to say [$N_{\text{Prefer not to say}} = 24(2.12\%)$] their gender identity are mostly 1st year students [$N_{\text{LGBTQIAP+}} = 63(6.27\%)$; $N_{\text{Prefer not to say}} = 22(2.19\%)$].

Table 1. Cross tabulation of respondents' demographic characteristics based on gender and year level

Gender	Year Level		Total
	1st year *N*(%)	2nd year *N*(%)	
Male	*321*(31.94%)	*83*(67.48%)	*404*(35.82%)
Female	*599*(59.60%)	*34*(27.64%)	*633*(56.12%)
LGBTQIAP+	*63*(6.27%)	*4*(3.25%)	*67*(5.94%)
Prefer not to say	*22*(2.19%)	*2*(1.63%)	*24*(2.12%)
Total	**1005(89.1%)**	**123(10.90%)**	**1128(100.00%)**

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Instruments

The survey questionnaire that was used to obtain data from the respondents is subdivided into three parts. The first part obtained data about respondents' demographic characteristics (i.e., year level and gender). Meanwhile, the second part consist of the original Sedentary Behavior Questionnaire developed by Rosenberg et al. (2010). This particular tool measures students' weekly and weekend activity levels. Lastly, the Teacher's Emotional Support Scale by Romano et al. (2020) was also used. This instrument measures the perceived level of emotional support being received by students from their Physical Education professors based on three components namely, Positive Climate, Professor's Sensitivity, and Regards to Adult Perspective. Responses may then be recorded using a 5-point Likert Scale from 1- "Not at all true" to 5- "Very true." There are some words that were changed (i.e., "teacher" to "professor" and "adolescent" to "adult"), to tailor-fit the instrument to the current setting of the study.

Statistical Analysis

The present study have used *cross-tabulation analysis*. It is a contingency table that displays the frequency of respondents in terms of gender and year level. Lastly, *multiple regression* has been performed to determine the direct influence of Perceived PES to SLB (weekdays and weekends). Furthermore, each of the components of Perceived Professor's Emotional Support namely, PC, PS and RAP were also regressed to SDL. Furthermore, a normality test was performed to determine the distribution of data from the variables being measured in the present study. As can be seen in Table 2, most of the variables did not obtained the threshold (2, -2). Therefore, it can be construed that the data are not normally distributed.

Table 2. Normality estimates

Variable	Mean ± SD	Skewness	Kurtosis
Positive climate	4.67 ± .55	-2.555	9.050
Professor's sensitivity	4.37 ± .63	-1.265	2.266
Regard to adult perspective	4.54 ± .62	-1.759	3.900
Sedentary lifestyle behavior$^{(WD)}$	2.30 ± .93	.485	.465
Sedentary lifestyle behavior$^{(WE)}$	2.35 ± .98	.326	.001

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Ethical Statement

The study adhered to strict ethical standards and was registered with the Research Management Office of Bulacan State University as self-funded research by the College Research and Development Unit (CRDU) of the College of Sports, Exercise, and Recreation, under document number CSER-CRDU-2024-007. Following approval, data was collected via an online survey using Google Forms, distributed through Google Classroom by physical education professors. The survey detailed the study's purpose, inclusion criteria, and instruments and emphasized voluntary participation and the option to withdraw at any time. Respondents were informed of potential minor risks, no monetary compensation, data handling procedures, and the protection of their privacy. Data was stored securely on a password-protected USB drive for three months and would not be used for further research. Anonymity was maintained throughout, and all personal information was protected under the Data Privacy Act of 2012. Respondents could withdraw or request debriefing at any time.

RESULTS

Table 3 illustrates the multiple linear regression analysis performed determining the direct influence of Perceived PES to SLB. Based on the findings, it was observed that Perceived PES predicts $SLB^{(WD)}$, proposing that perceived professor's emotional support directly influence students' SLB during weekdays [$F(3, 1124) = 3.104$, $p = .026$]. Furthermore, the $R^2 = .008$ indicates that the model accounts for 0.8% of the variance in $SLB^{(WD)}$. The findings indicate that while emotional support from physical education professors can encourage students to be more physically active, its influence on reducing sedentary behavior during weekdays is minimal. The small effect size and R^2 value suggest that other factors, such as personal motivation, academic stress, or physical environment, may significantly influence students' sedentary behaviors. Therefore, while emotional support is essential, it may not be enough to significantly impact sedentary lifestyles. Hence, H_1 has been rejected.

Also, the coefficients were regressed to determine each components' direct influence to $SLB^{(WD)}$. It was observed that PC does not predict $SLB^{(WD)}$, postulating that PC does not significantly influence $SLB^{(WD)}$ ($\beta = .039$, $t = .531$, $p = .595$). The finding suggests that the PC created by the professor does not significantly influence students'

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sedentary behavior during weekdays. This may indicate that while a PC is crucial for student engagement and well-being, it does not directly influence the factors contributing to sedentary behavior. Therefore, **H_{1a}** has been supported. Lastly, it was observed that PS and RAP predicts $SLB^{(WD)}$, construing that PS (β = -.189, t = -.128, p = .012) and RAP (β = .201, t = 2.705, p < .001) directly influence $SLB^{(WD)}$. The negative coefficient for PS indicates that higher sensitivity is linked to reduced SLB during weekdays, though the effect size is small and statistically insignificant. This suggests that while sensitivity matters, its influence on SLB is minimal. On the other hand, the positive coefficient for RAP shows that more significant consideration of students' views is associated with increased SLB. This implies that while valuing student perspectives is essential, it should be balanced with strategies that promote physical activity. Professors may need to integrate emotional support with active interventions to reduce SLB effectively. In this regard, **H_{1b}** and **H_{1c}** were rejected. In general, it can be hypothesized that all components of perceived professor's emotional support when combined, has a direct and significant influence on $SLB^{(WD)}$.

Furthermore, it was observed that perceived PES predicts $SLB^{(WE)}$, suggesting that perceived PES directly influence students' $SLB^{(WE)}$ [$F(3, 1124) = 4.837$, p = .002]. Additionally, the R^2 = .013 indicates that the model accounts for 1.3% of the variance in $SLB^{(WE)}$. The analysis shows that perceived PES has a statistically significant but small effect on students' SLB during weekends, similar to weekday findings. This suggests that while emotional support is essential, it is not a significant factor in students' weekend SLB. Additional variables like access to physical activities, peer influences, or weekend routines may better explain these behaviors. Educators and policymakers should recognize that while emotional support is crucial, a broader approach involving parents, community programs, and environments promoting weekend physical activity may be more effective in reducing SLB. Therefore, **H_2** has been rejected.

Likewise, the coefficients were also regressed to examine each components' direct influence to $SLB^{(WE)}$. It was observed that PC does not predict $SLB^{(WE)}$, postulating that PC is not directly related to $SLB^{(WE)}$ (β = .075, t = .976, p = .329). The analysis reveals that PC does not significantly influence $SLB^{(WE)}$. This suggests that while a PC is essential, it does not directly influence how students spend their time

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during weekends, particularly regarding their SLBs. Therefore, interventions to reduce SLB on weekends must consider broader factors beyond the classroom environment. In this, **H_{2a}** has been supported. Moreover, it was observed that both PS and RAP predicts $SLB^{(WE)}$, indicating that PS (β = -.295, t = -3.791, p < .001) and RAP (β = .218, t = 2.796, p = .005) are directly connected to $SLB^{(WE)}$. A negative coefficient and a significant t-value (-3.791) indicate that higher PS is associated with reduced $SLB^{(WE)}$. This suggests that sensitive professors, who understand and respond to students' needs, may encourage more active weekend behavior, potentially due to improved self-esteem and motivation among students. In contrast, the positive relationship between RAP and $SLB^{(WE)}$, supported by a t-value of 2.796, suggests that emphasizing student viewpoints may inadvertently lead to more sedentary behaviors. This might occur if students favor sedentary activities or if excessive autonomy is granted without sufficient guidance. Therefore, professors should balance valuing student perspectives with mentoring them toward healthier lifestyle choices. Hence, **H_{2b}** and **H_{2c}** were rejected.

Table 3. Hypotheses testing and multiple linear regression analysis

Hypothesis	Regression weights	Beta Coefficient	R^2	F	t-value	p-value	Decision
H_1	PES → $SLB^{(WD)}$	2.028	.008	3.104	-	.026	Rejected
H_{1a}	PC → $SLB^{(WD)}$	.039	-	-	.531	.595	Accepted
H_{1b}	PS → $SLB^{(WD)}$	-.189	-	-	-.128	.012	Rejected
H_{1c}	RAP → $SLB^{(WD)}$	.201	-	-	2.705	.007	Rejected
H_2	PES → $SLB^{(WE)}$	2.296	.013	4.837	-	.002	Rejected
H_{2a}	PC → $SLB^{(WE)}$	.075	-	-	.976	.329	Accepted
H_{2b}	PS → $SLB^{(WE)}$	-.295	-	-	-3.791	<.001	Rejected
H_{2c}	RAP → $SLB^{(WE)}$	.218	-	-	2.796	.005	Rejected

Note: Significance p <.05.
PES- Professor's Emotional Support, PC- Positive Climate, PS- Professor's Sensitivity, and RAP- Regards to Adult Perspective, $SLB^{(WD)}$- Sedentary Lifestyle Behavior (Weekdays), $SLB^{(WE)}$- Sedentary Lifestyle Behavior (Weekends)

Discussion

The findings of the investigation indicate a clear connection between how much emotional support students perceive from their professors and their SLB on weekdays. Students who feel more emotionally supported by their professors are less likely to participate in sedentary behaviors on weekdays than those who feel less supported. The

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potential explanation for this association could be that students who receive emotional support from their professors may feel more motivated, self-assured, and have better overall well-being (Fierro-Suero et al., 2023). This could result in them engaging in healthier activities, such as being less sedentary. Emotionally encouraging professors can cultivate a school atmosphere that promotes feelings of belonging, independence, and involvement (Zheng, 2022), motivating students to engage in physical activities or other non-sedentary activities on weekdays.

Furthermore, the role of various components of perceived professor's emotional support on students' sedentary lifestyle behaviors during weekdays presents nuanced insights into the complexities of these relationships. The analysis revealed that PC does not significantly influence $SLB^{(WD)}$. This suggests that while a positive classroom climate is vital for overall student well-being and engagement, it may not directly influence SLBs, as opposed by some studies (Morton et al., 2016). This finding supports the study's hypothesis and implies that factors beyond a positive classroom environment are more critical in influencing how students spend their time during the weekdays. The absence of a direct link between PC and $SLB^{(WD)}$ could indicate that while a positive climate contributes to a supportive educational environment, it does not necessarily address the specific motivators or deterrents related to physical activity and sedentary behavior. Moreover, the findings indicate that PS and RAP does predict weekday $SLB^{(WD)}$, with PS negatively associated and RAP positively associated. Although the negative association with PS suggests that increased sensitivity can reduce SLB, the small effect size implies limited practical influence. Conversely, the positive relationship with RAP suggests that while valuing student perspectives fosters autonomy, it may inadvertently increase SLB if not balanced with active involvement strategies (Schneider et al., 2020). This highlights the need for a combined approach that integrates emotional support with targeted interventions to reduce SLB effectively. The complexity of these dynamics suggests that further research is needed to validate or challenge these findings.

The study shows that perceived emotional support from PE professors directly influences students' SLB on weekends. Students who feel more supported tend to engage in more sedentary activities, possibly due to enhanced well-being and

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connection with their professors (Daly & Morton, 2011). While emotional support can foster positive habits and encourage involvement in activities (Escaron et al., 2021), its indirect impact on increasing sedentary behavior suggests a need for balanced guidance. The findings highlight the importance of solid professor-student relationships in shaping students' leisure activities and overall habits, emphasizing the role of educators in promoting healthier lifestyles (Sáez et al., 2021). Also, the analysis shows a statistically significant but small effect of perceived emotional support on SLB during weekends. This suggests that while emotional support from professors influences students' weekend activities, it is not a significant determinant of their SLB Factors like access to recreational activities, peer influence, and family routines (Puhakka, 2021) may have a more significant impact. Thus, a broader approach that includes community and parental involvement and promotes active lifestyles may be more effective. The study's hypothesis of a substantial influence from emotional support is rejected, and further research is recommended to verify these findings.

Further analysis reveals that perceived professor's emotional support components influence weekend SLB differently. PC does not significantly influence SLB on weekends, suggesting that interventions must go beyond the classroom (Koorts et al., 2023). In contrast, PS negatively influences SLB, indicating that higher sensitivity is linked to reduced SLB due to positive reinforcement (Cheung, 2020). However, RAP, while valuing students' viewpoints is beneficial, it may inadvertently lead to more sedentary choices if not paired with active engagement strategies (Schneider et al., 2020). These findings underscore the need for professors to balance emotional support with guidance on healthy lifestyles. Based on these results, the study's hypotheses have been rejected, and further research is recommended to verify these findings.

Conclusion

This study highlights a significant but modest correlation between students' sedentary behaviors and their perception of emotional support from professors. It shows that while professor-student relationships affect lifestyle choices outside school, emotional support alone has a limited impact on reducing sedentary behavior, particularly on weekends. Professor sensitivity negatively correlates with sedentary

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time, suggesting that more sensitive professors may reduce students' sedentary behavior. However, a focus on student perspectives can unintentionally increase sedentary activities.

Other factors also play a crucial role in sedentary behaviors, including access to recreational facilities, peer influence, gender differences, family routines, academic pressures, and technology use. Addressing these factors alongside emotional support could provide a more comprehensive approach to promoting physical activity.

Future research should explore these dynamics further, using mixed methods and longitudinal studies to understand how emotional support evolves and affects physical activity. Qualitative interviews could offer deeper insights into student experiences and environmental influences. This study's focus on students from a Philippine state university may limit generalizability, and self-reported measures could introduce bias. Further research in diverse settings is needed to validate and extend these findings. Overall, this study contributes to understanding the impact of professor-student relationships on student health behaviors, emphasizing the need for integrated strategies to promote physical activity.

Acknowledgements

The authors would like to thank all the students from for being part of this study. Furthermore, the author would like to thank the University President of the Bulacan State University, Dr. Teody C. San Andres; OIC-Vice President for Academic Affairs, Dr. Warlito C. Galita; Vice President for Research, Innovation and Extension, Dr. Keno Piad; Research Management Office Director, Dr. Jayson Victoriano; and, Chancellor-Main Campus, Dr. Romeo D.C. Inasoria. Moreover, the author would also like to thank the Dean and Associate Dean of the College of Sports, Exercise and Recreation of the Bulacan State University, Dr. Rafael T. Celso and Mr. Anthony J. Antonio for their unending support.

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