Bartın University Journal of Faculty of Education
BUEFAD Volume 15, Issue 1
277-286
dergipark.org.tr/buefad
DOI: 10.14686/buefad.1728475

The Effect of Interest in Physical Education Classes on Identification with School: The Mediating Role of Teacher Feedback

Mehmet Akif Yücekaya [a*]
a Asst. Prof. Dr., Dicle University, https://orcid.org/0000-0003-3853-5660 *yucekayaakif@gmail.com

Research Article
Received: 27.07.2025
Revised: 27.12.2025
Accepted: 13.01.2026

Abstract

This research aims to examine the influence exerted by secondary school students' Interest in Physical Education Classes (IPEC) in shaping their level of identification with school, as well as the intermediary function of perceived teacher feedback within this association. The participant group for this research consisted of 493 students attending different middle schools in Adıyaman. The study was conducted within the framework of the correlational survey model of quantitative research methods; the influence of students' IPEC in predicting school identification, as well as the intermediary contribution of teacher feedback within this association, was tested using structural equation modelling. The findings show that students' IPEC emerged as a significant predictor of school identification, both directly ($\beta = 0.2198$, $p < .001$) and indirectly through teacher feedback ($\beta = 0.0323$, $p = .002$). Teacher feedback acts as a mediating factor in this relationship, linking students' IPEC to their sense of school affiliation. In conclusion, the findings indicated that students' IPEC, in conjunction with teacher feedback, plays a decisive role in their identification with school.

Keywords: identification with school, physical education, interest, teacher feedback, motivational climate.

Beden Eğitimi Dersine İlginin Okulla Özdeşleşme Üzerindeki Etkisi: Öğretmen Geribildiriminin Aracı Rolü

Öz

Bu araştırma, ortaokul düzeyinde eğitim gören öğrencilerinin beden eğitimi dersine duydukları ilginin okulla özdeşleşme düzeyleri üzerindeki etkisini ve bu ilişkide algılanan öğretmen geribildiriminin aracı rolünü incelemeyi amaçlamaktadır. Araştırmanın örneklemini Adıyaman'daki farklı ortaokullarda öğrenim gören 493 öğrenci oluşturmaktadır. Çalışma, nicel araştırma yöntemlerinden ilişkisel tarama modeli çerçevesinde gerçekleştirilmiş; beden eğitimi dersine duyulan ilginin okulla özdeşleşme üzerindeki etkisi ve bu ilişkide öğretmen geribildiriminin aracı rolü, yapısal eşitlik modellemesiyle test edilmiştir. Elde edilen bulgular, öğrencilerin beden eğitimi dersine duydukları ilginin okulla özdeşleşmeyi hem doğrudan ($\beta = 0.2198$, $p < .001$) hem de öğretmen geribildirimi aracılığıyla dolaylı olarak ($\beta = 0.0323$, $p = .002$) anlamlı biçimde yordadığını göstermektedir. Öğretmen geribildirimi, bu ilişkiyi destekleyen aracı bir unsur olarak işlev görmekte ve öğrencinin beden eğitimi dersine ilgisiyle okulla özdeşleşmesi arasında köprü görevi üstlenmektedir. Sonuç olarak, bu çalışma beden eğitimi dersine duyulan ilginin ve öğretmenlerden alınan geri bildirimin, öğrencilerin okulla özdeşleşme süreçlerinde belirleyici bir rol oynadığını ortaya koymuştur.

Anahtar kelimeler: okulla özdeşleşme, beden eğitimi, ilgi, öğretmen geribildirimi, motivasyonel iklim.

To cite this article in APA Style:

Yücekaya, M. A. (2026). The Effect of Interest in Physical Education Classes on Identification with School: The Mediating Role of Teacher Feedback. *Bartın University Journal of Faculty of Education, 15*(1), 277-286. https://doi.org/10.14686/buefad.1728475

© 2026 Bartın University Journal of Faculty of Education. This is an open-access article under the Creative Commons Attribution NonCommercial 4.0 license (https://creativecommons.org/licenses/by-nc/4.0/).

INTRODUCTION

Identification with school refers to a complex construct involving students' emotional attachment to their educational environment and their valuation of the institution's objectives (Voelkl, 1996). This structure is not limited to the student's physical presence at school; it also contributes significantly to their psychological well-being, motivation to learn, and commitment to the school institution (Aydoğmuş & Balcı, 2020; Voelkl, 2012). The impact of this multidimensional structure on students is not limited to academic performance. Identification supports students' emotional, social, and psychological functioning by making them feel like they are part of the school (Bizumic et al., 2009; Miller et al., 2018; Voelkl, 2012). According to the findings reported by Bizumic et al. (2009), students' sense of affiliation with their school showed significant relationships with psychosocial variables such as self-esteem, stress level, and social adjustment, and they emphasised that identification is a protective factor in terms of psychological resilience. Empirical evidence points to the fact that fostering constructive relationships in school settings substantially contributes to the enhancement of students' social functioning as well as their emotional health.

Identification with school, also referred to as school engagement in the literature (Cross et al., 2016), is a multifaceted construct that integrates how emotionally affiliated students feel with their school environment and the extent to which they endorse the institution's goals (Voelkl, 1996). While the terms school engagement and school belonging are sometimes used interchangeably in the literature, they refer to related but distinct constructs. Engagement typically involves behavioural, emotional, and cognitive dimensions of participation in school activities (Fredricks et al., 2004), whereas belonging emphasizes students' perceived acceptance, inclusion, and emotional connection to the school community (Goodenow, 1993). In this study, the concept of school identification is positioned at the intersection of these constructs, reflecting both active involvement and a sense of affiliation. Indeed, one of the fundamental mechanisms determining the success of teaching processes is the strength of this psychological bond (Ferreira et al., 2011). Numerous contextual and structural variables shape the extent of students' affiliation with their school environment. Fletcher (2009) highlighted that interventions like smaller class sizes enhance this affiliation and, in turn, have a positive indirect impact on academic achievement. This study shows that improvements to the physical environment have indirect but positive effects on the psychological bond students form with their school.

An analysis of prior scholarly work reveals studies addressing psychological and social factors that affect identification with school, alongside aspects pertaining to the built environment of the school. The strength of interactions between students and teachers (Voelkl, 2012), the sense of security felt in the school environment (Mitchell et al., 2018), the supportive structure of the classroom climate (Obermeier et al., 2024) and students' emotional, cognitive and behavioural levels of participation in class (Fredricks et al., 2004) are among the important factors that support the development of students' psychological connection with their schools. In particular, the connection students establish with their teachers, their interest in class, and the positive classroom climate created are seen as important factors that increase their identification with school.

Physical education classes stand out as a subject that increases students' social interaction through physical activities and, as a result, can improve students' level of identification with the school (Bailey, 2006; Uğraş & Temel, 2020). It is believed that subjects with high social interaction increase students' interest in the subject. Students' interest in courses is considered a factor that affects both their academic development and their psychological connection to the school (Hansen, 2021). Interest is defined as an individual's focus on a subject, willingness to learn, and active participation in the learning process (Chen & Wang, 2017; Hidi & Renninger, 2006). Physical education classes have the potential to generate individual and situational interest in students due to their physical-based structure and opportunities for social interaction (Uğraş & Temel, 2020). Students' IPEC activities are an important factor that determines both their choice of activities and their level of participation in the class. Furthermore, this interest can shape students' attitudes towards their experiences in the school environment (Chen, 1996). Students' IPEC is closely related to teacher attitudes, family habits, and the school environment (Montañana et al., 2022). Within the scope of Self-Determination Theory (Ryan & Deci, 2000), students' interest and engagement in school-related activities are fostered when three basic psychological needs (autonomy, competence, and relatedness) are met. In the context of physical education, teacher feedback plays a crucial role in supporting these needs, thereby enhancing intrinsic motivation and deepening students' identification with school. IPEC plays a meaningful mediating role between students' life satisfaction and their level of attachment to school. This interest is not limited to momentary motivation. It also serves an important function in strengthening students' psychological bonds with teachers, peers, and the school institution (Ateş et al.,

2025). Sağın (2022) emphasized the positive influence of students' IPEC in relation to overall life contentment; he concluded that this structure supports students' subjective well-being levels and school attachment. Similarly, Lobo and colleagues (2023) determined that individual interest levels have a significant effect on school attachment; they stated that sub-dimensions such as emotional attachment, value attribution, and desire for re-participation developed in the physical education environment strengthen the psychological bond with the school. Ściślak et al. (2013) suggested that including activities that align with students' personal preferences during physical education classes in the curriculum could increase the meaning of the class in the eyes of students and their sense of commitment. Drawing upon existing research, it becomes evident that IPEC is a holistic structure that affects not only the level of physical participation but also the student's general attitude towards school and identification processes.

Relational dynamics within the school community contribute meaningfully to students' perceived sense of connection within the school environment. When students perceive feedback from their teachers as a fundamental element of a supportive classroom environment, this can increase their perceived connection with the school community and their level of behavioural participation (Obermeier et al., 2024). Indeed, supportive learning environments created by teachers through the effective use of feedback significantly increase students' identification with school and school participation levels (Monteiro et al., 2021). Reschly and Christenson (2012) emphasised that teacher-student interaction, the supportive structure of the learning environment, and feedback processes are decisive for student participation and psychological attachment. Câmpean and colleagues (2024) identified that affirming teacher input contributes positively to students' mental constructs including self-confidence, drive to achieve, and class involvement. Ani (2019) found that feedback is instrumental in fostering learners' motivation, sense of self-assurance, and belief regarding their academic and personal competencies. Similarly, Mouratidis and colleagues (2008) emphasized that positive feedback enhances emotional connection to the learning environment and strengthens school identification by fostering self-efficacy and autonomous motivation. Studies conducted within the scope of physical education classes have shown that teacher feedback has a decisive effect on students' learning motivation, attitudes towards activities, and perceived competence (Nicaise et al., 2007). Studies show that teacher feedback supports students' academic achievement as well as their psychological attachment and identification with school. In this regard, the present study aims to investigate how students' IPEC influences their sense of identification with school and whether perceived teacher feedback (PTF) mediates this relationship. The study tested the following hypotheses:

H1: Students' IPEC positively and significantly predicts their level of school identification.

H2: Students' IPEC positively and significantly predicts their perception of teacher feedback.

H3: Students' perceived teacher feedback positively and significantly predicts their level of school identification.

H4: Perceived teacher feedback functions as a mediator in the association between students' IPEC and their level of school identification.

METHOD

This study was conducted using a correlational research design, grounded in quantitative methodology. Correlational research is a methodological approach used to examine the direction and strength of relationships between variables (Karasar, 2022). The investigation explored whether perceived teacher feedback served an intermediary function in the influence of students' IPEC on identification with school.

The assumed model in the study was evaluated within the scope of the mediation model. Such models test how a predictor variable influences an outcome variable through a mediating factor (Hayes, 2018). In this context, in line with the research model, the direct impact of students' IPEC on school identification was examined, along with how this effect was indirectly shaped through perceived teacher feedback.

Research Design

The research group for this study consisted of 493 students attending five middle school education institutions in Adıyaman during the spring semester of the 2024–2025 academic year. Participants were selected through a convenience sampling method and took part in the study voluntarily. Among the participants, 22.9% were in Grade 5, 27.2% in Grade 6, 31.4% in Grade 7, and 18.5% in Grade 8.

In terms of participants' gender, 48.7% within the sample group were male (n = 240), and 51.3% were female (n = 253). When examining participation in sports activities, 24.1% of participants (n = 119) are members of at least one sports team (school or club), while 75.9% (n = 374) are not members of any sports team.

Table 1. Demographic Information

Variables	Category	N	%
Grade	5th Grade	113	22.9
	6th Grade	134	27.2
	7th Grade	155	31.4
	8th Grade	91	18.5
Gender	Male	240	48.7
	Female	253	51.3
Participating in a Sports Team	Participant	119	24.1
	Nonparticipant	374	75.9
Total		493	%100

Data Collection Tools

The Perceived Teacher Feedback Scale, initially developed through the work of Koka and Hein (2003), was subsequently linguistically refined and culturally contextualized for use in the Turkish educational context, as conducted by Kara et al. (2018). It is used to measure the level of feedback participants perceive from their teachers. The scale consists of 14 items and has four dimensions: negative nonverbal feedback, positive nonverbal feedback, performance information and positive general feedback. The reliability indicator (Cronbach's alpha) calculated for the scale's sub-dimensions was observed to span from .69 to .83. The internal consistency coefficients obtained in this study indicate that the scale is reliable. This study reported an internal consistency coefficient (Cronbach's α) of .73 and a McDonald's ω value of .74, reflecting satisfactory internal consistency.

To assess students' levels of school identification, the scale originally introduced by Voelkl (1996) and later adapted for use in the Turkish context by Aydoğmuş and Balcı (2020) was employed. This scale comprises two dimensions - Belonging and Valuing - and contains a total of 16 items. The original scale demonstrated high reliability, as indicated by Cronbach's alpha coefficients between .91 and .93 across its subscales. In the current study, internal consistency was supported by reliability estimates of Cronbach's α = .77 and McDonald's ω = .79.

The Physical Education and Sports Interest Scale (PESIS), originally constructed by Uğraş and Temel (2020), was employed to assess lower secondary students' engagement with physical education and sports. This unidimensional scale comprises 10 statements rated on a 5-point Likert-style scale. The original version presented a Cronbach's α coefficient of .87, providing evidence for the instrument's internal reliability. In this study, reliability indicators demonstrated strong internal consistency, with Cronbach's α = .89 and McDonald's ω = .91.

Data Analysis

Jamovi 2.4.1.0 statistical software was utilized to perform analysis on the data collected throughout the research. As part of the data analysis process, descriptive measures were initially computed to examine the variables' mean, standard deviation, skewness, and kurtosis values. The normality of the distribution was assessed based on whether the skewness and kurtosis coefficients were within acceptable limits (skewness -3; kurtosis +10; Kline, 2011). Pearson correlation analysis was applied to identify the associations among constructs within the research framework. Subsequently, Structural Equation Modelling (SEM) was employed to investigate the influence of students' IPEC — the independent variable — on their identification with school, and to evaluate the intermediary role of perceived teacher feedback within this association.

In the context of structural modelling analyses, estimates of direct, indirect, and total effects were computed; significance was assessed based on the 95% confidence interval and corresponding z-values. To assess the statistical relevance of indirect effects, the bootstrap resampling technique was employed, with confidence intervals generated based on 5000 iterations. An indirect effect was considered statistically significant if the confidence interval excluded zero, in line with the recommendation of Preacher and Hayes (2008). The internal consistency of all scales used in the study was evaluated using McDonald's ω and Cronbach's α coefficients.

FINDINGS

Table 2 displays the descriptive statistics related to middle school students' IPEC, perceived teacher feedback, and levels of school identification.

Table 2. Descriptive Statistics for Variables

Variable	Mean ($\bar{X}$)	SD	Skewness	Kurtosis
IPEC	4.17	0.703	−1.15	1.78
PTF	3.16	0.579	−0.068	0.57
ISS	2.88	0.589	−0.141	2.52

Note. IPEC: Interest in Physical Education and Sports Classes; PTF: Perceived Teacher Feedback; ISS: Identification with School Scale

An examination of the values in Table 2 reveals that the variable with the highest average among the participants is IPEC ($\bar{X}$ = 4.17). The average PTF was calculated as 3.16, and the average identification with school was calculated as 2.88. When examining the skewness and kurtosis values, it is seen that the distributions of all variables remain within the limits suggested by Kline (2011) (–3 for skewness and +10 for kurtosis). This finding indicates that the variables meet the assumption of normal distribution.

Table 3. Correlation Values of Variables

Variables	ISS	PTF	IPEC
ISS	—		
PTF	.225 *	—	
IPEC	.301 *	.237 *	—

Note. *p<.001; IPEC: Interest in Physical Education and Sports Classes; PTF: Perceived Teacher Feedback; ISS: Identification with School Scale

As presented in Table 3, a statistically significant positive correlation exists between identification with school and PTF (r = .225, p < .001). Likewise, a statistically significant positive association was observed between IPEC and identification with school (r = .301, p < .001). Furthermore, a statistically significant positive correlation was identified between IPEC and PTF (r = .237, p < .001). These results indicate that there are mutually significant relationships between the variables in the model.

Table 4. Analysis Results Related to the Mediating Role of Perceived Teacher Feedback

	Coefficient (β)	SE	z	p	%95 Confidence Interval	
					Lower	Upper
Direct Effects						
IPEC→ISS	0.2198	0.0366	6.01	< .001	0.1482	0.2915
IPEC→PTF	0.1946	0.0361	5.40	< .001	0.1240	0.2653
PTF→ISS	0.1659	0.0444	3.74	< .001	0.0789	0.2530
Indirect Effects						
IPEC→PTF→ISS	0.0323	0.0105	3.07	0.002	0.0117	0.0529
Total Effects						
IPEC→ISS	0.2521	0.0361	6.99	< .001	0.1815	0.3228

Note. IPEC: Interest in Physical Education and Sports Classes; PTF: Perceived Teacher Feedback; ISS: Identification with School Scale

As part of the study, Structural Equation Modelling (SEM) was conducted to examine the intermediary role of PTF in the relationship between students' IPEC and their identification with school. The findings from the analysis were examined with regard to immediate, mediated, and total effects. An analysis of the direct pathways indicated that IPEC had a statistically significant and positive influence on identification with school (β = .2198, SE = .0366, z = 6.01, p < .001). This finding shows that students' IPEC directly increases their level of identification with school.

A statistically meaningful positive association emerged between IPEC and students' perception of teacher feedback (β = .1946, SE = .0361, z = 5.40, p < .001). PTF significantly predicts and supports identification with school (β = .1659, SE = .0444, z = 3.74, p < .001).

The model's indirect effect analysis indicated that the pathway from IPEC to perceived teacher feedback to school identification was statistically significant (β = .0323, SE = .0105, z = 3.07, p = .002). These findings imply that PTF serves as a partial mediator between students' IPEC and their identification with school.

Furthermore, when evaluating the total effect, the overall influence of IPEC on school identification was revealed as statistically meaningful and positively associated (β = .2521, SE = .0361, z = 6.99, p < .001). These results highlight that students' IPEC contributes to their identification with school through both direct and mediated effects.

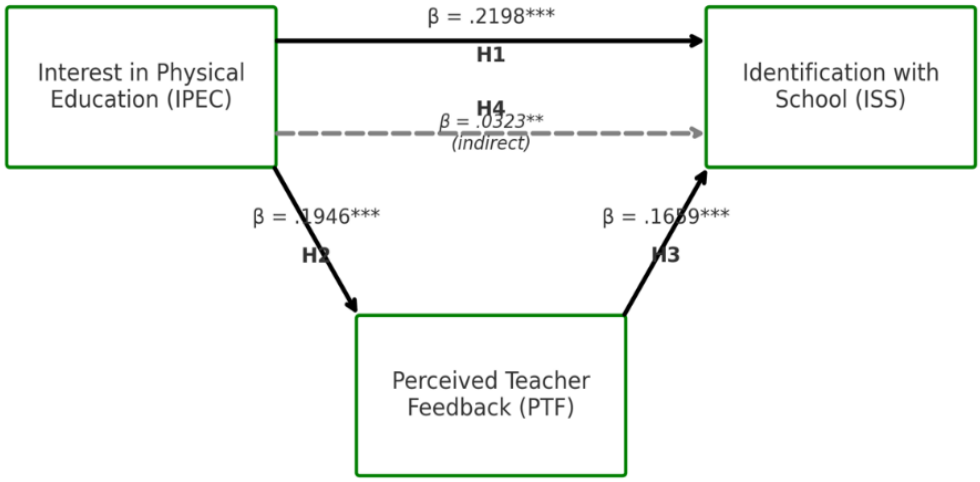


Figure 1. *Hypothesized Structural Model with Direct and Indirect Effects*

DISCUSSION & CONCLUSION

The present study seeks to explore how students' IPEC influences their identification with school, as well as to evaluate the intermediary role of perceived teacher feedback within this association. Findings from the research indicated that students' IPEC is a significant predictor of their school identification, and PTF functions as a meaningful mediator in this connection. The hypothesis that 'students' IPEC positively and significantly predicts their levels of identification with school' was tested and confirmed in the study. The analysis indicated that students' IPEC exerts a statistically significant and positive influence on their level of school identification. Bautista and colleagues (2023) found in their study that students' individual interest is significantly related to school attachment and this interest particularly strengthens school belonging in physical education classes. Sağın (2022) noted that IPEC significantly affects students' psychological well-being levels and positive attitudes toward the school environment. Ateş et al. (2025) stated that a high level of IPEC not only increases classroom participation but also reinforces the psychological bond students develop with the school environment. These results reveal that IPEC strengthens the bond formed with the school.

The hypothesis that 'students' IPEC positively and significantly predicts their perceived levels of teacher feedback' was also tested and confirmed in the study. This finding indicates that IPEC significantly influences their interpretation of the responses and evaluations provided by their teachers. Koka and Hein (2005) emphasized that receiving affirmative feedback from teachers is among the key contributors to fostering intrinsic motivation within the context of physical education, noting a marked rise in students' engagement when such feedback was provided. Similarly, Cox and Williams (2008) found that teacher support enhances both students' interest in the subject and their perception of feedback by fulfilling essential psychological needs such as competence, autonomy and relatedness. Moreover, Nicaise et al. (2007) noted that affirmative instructional responses from teachers during physical education sessions enhance students' perceived competence, their willingness to exert effort, and their overall enjoyment of the lesson. These results reveal that students' IPEC has an impact on their interactions with the teacher and their perception of the feedback they receive from the teacher.

The hypothesis that 'students' perception of teacher feedback positively and significantly predicts their level of identification with school' was also tested and confirmed in the study. This finding shows that teacher feedback contributes to students' identification with school and increases their commitment to school. Carvalho et al. (2021) underscored the critical function of teacher-provided feedback in fostering school identification, emphasizing that constructive responses contribute to students feeling appreciated and supported. Similarly, in a study conducted by Monteiro et al. (2021), it was stated that constructive feedback provided by teachers strengthened students' psychological bonds with the school and that perceived supportive structures in the classroom increased school attachment. Mouratidis et al. (2008) demonstrated that encouraging input provided by physical education

instructors enhances students' autonomous motivation and well-being by fulfilling their need for competence. These results indicate that teacher-provided feedback is a key contributor to fostering students' constructive connections with their school.

The hypothesis stating that 'PTF functions as an intermediary factor linking IPEC to school identification' was also tested and supported within the scope of the study. It was concluded that IPEC directly predicts identification with school in a meaningful way; however, this relationship is also indirectly effective through PTF. This suggests that teacher feedback functions not only as a direct factor but also serves as a crucial intermediary linking students' interest to their school identification. Guo et al. (2023) noted that intermediary variables such as autonomous motivation and the satisfaction of psychological needs frequently account for the link between instructional support from teachers and students' active involvement in learning. The results underscore the dual influence of teacher feedback on students' attachment to school, operating through both direct and mediated pathways. Similarly, in a qualitative investigation, Garn et al. (2011) concluded that students' IPEC is influenced by the instructional environment and teacher attitudes. They observed that meaningful interactions during lessons foster students' positive emotional connections to both the subject and the broader school experience. This indicates that students' perceptions of teacher feedback may indirectly contribute to their sense of school belonging alongside their interest levels. Similarly, existing literature highlights that students' IPEC is reflected in their school belonging and attachment through their interactions with teachers (Ateş et al., 2025). Additionally, Çelik et al. (2023) observed a robust and positive association between younger students' perspectives on physical education and games courses and their level of school connectedness. Taken together, the results indicate that IPEC contributes meaningfully to reinforcing students' psychological affiliation with the school setting.

In light of the study's findings, it appears that students' IPEC exerts a meaningful and statistically robust influence on their degree of school identification. Students' interest in the class strengthens their psychological attachment and sense of belonging to the school environment. However, it was concluded that the feedback perceived from the teacher significantly mediates this relationship between IPEC and identification with school. Feedback provided by physical education teachers has a direct impact on students' school identification and serves as a meaningful mediating mechanism that strengthens the connection between IPEC and their sense of belonging to school. These findings highlight the importance of teacher-student interactions and students' IPEC in strengthening their psychological attachment to the school.

Recommendations and Limitations

Drawing on the outcomes of this research, several suggestions can be proposed for future studies and educational applications. First, examining the relationship between IPEC and identification with school among students of different age groups can provide comparative results from a developmental perspective. Additionally, employing qualitative data collection methods—especially student interviews—is advised to explore in greater depth how learners interpret and experience teacher feedback. To offer a more holistic evaluation of this process, future studies may also examine how teacher-related variables—such as gender, professional experience, and area of specialization—interact with feedback practices in shaping students' attachment to school. Finally, conducting similar studies in different socio-cultural contexts can test the generalisability of the findings.

There are certain methodological constraints in the current research. Primarily, the findings rely on self-reported data from students, which may introduce the risk of response bias. Secondly, the study relied solely on quantitative instruments (scale-based measures), which may have constrained the depth and richness of the data interpretation. Finally, the research was conducted with middle school students attending specific schools in Adıyaman province; therefore, the generalisability of the findings is limited.

Statements of Publication Ethics

This study was carried out in accordance with established ethical principles and approved by the Social and Human Sciences Ethics Committee of Dicle University (Approval No: 897808).

Conflict of Interest

The author affirms the absence of any conflicts of interest concerning this article.

REFERENCES

Ani, A. (2019). Positive feedback improves students' psychological and physical learning outcomes. *Indonesian Journal of Educational Studies, 22*(2), 135–143. https://core.ac.uk/download/pdf/326808643.pdf

Ateş, F., Sağın, A. E., & Uğraş, S. (2025). The mediating role of interest in physical education class between satisfaction with life and attachment to school. *Milli Eğitim Dergisi, 54*(246), 1075–1108. https://doi.org/10.37669/milliegitim.1502049

Aydoğmuş, M., & Balcı, Ö. (2020). Okulla özdeşleşme ölçeğinin Türkçeye uyarlanması. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 52*(52), 599–616. https://doi.org/10.15285/maruaebd.630590

Bailey, R. (2006). Physical education and sport in schools: A review of benefits and outcomes. *Journal of School Health, 76*(8), 397–401. https://doi.org/10.1111/j.1746-1561.2006.00132.x

Bautista, C., De Dios, D. A., & Lobo, J. (2023). The nexus between individual interest and school engagement in bolstering physical culture for a habitual healthy regime: A case of a state university. *Physical Education of Students, 27*(1), 24–35. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4436411

Bizumic, B., Reynolds, K. J., Turner, J. C., Bromhead, D., & Subasic, E. (2009). The role of the group in individual functioning: School identification and the psychological well-being of staff and students. *Applied Psychology: An International Review, 58*(1), 171–192. https://doi.org/10.1111/j.1464-0597.2008.00387.x

Câmpean, A., Bocoș, M., Roman, A., Rad, D., Crișan, C., Maier, M., Tăușan-Crișan, L., Triff, Z., Triff, D.-G., Mara, D., Mara, E.-L., Răduț-Taciu, R., Todor, I., Baciu, C., Neacșu, M.-G., Dumitru, I., Costache Colareza, C., & Roman, C. E. (2024). Examining teachers' perception on the impact of positive feedback on school students. *Education Sciences, 14*(3), Article 257. https://doi.org/10.3390/educsci14030257

Carvalho, C., Santos, N. N., António, R., & Martins, D. (2021). Supporting students' engagement with teachers' feedback: The role of students' school identification. *Educational Psychology, 41*(7), 863–882. https://doi.org/10.1080/01443410.2020.1849564

Çelik, S., Yaşar, F. S., Tülücü, O., & Tülücü, A. (2023). Studying the effect of physical education and game lesson on primary school students' attachment to school. *European Journal of Education Studies, 10*(8), 51–63. http://oapub.org/edu/index.php/ejes/article/view/4904

Chen, A. (1996). Student interest in activities in a secondary physical education curriculum: An analysis of student subjectivity. *Research Quarterly for Exercise and Sport, 67*(4), 424–432. https://doi.org/10.1080/02701367.1996.10607974

Chen, A., & Wang, Y. (2017). The role of interest in physical education: A review of research evidence. *Journal of Teaching in Physical Education, 36*(3), 313–322. https://doi.org/10.1123/jtpe.2017-0033

Cox, A., & Williams, L. (2008). The roles of perceived teacher support, motivational climate, and psychological need satisfaction in students' physical education motivation. *Journal of Sport and Exercise Psychology, 30*(2), 222–239. https://doi.org/10.1123/jsep.30.2.222

Cross, J. R., Bugaj, S. J., & Mammadov, S. (2016). Accepting a scholarly identity: Gifted students, academic crowd membership, and identification with school. *Journal for the Education of the Gifted, 39*(1), 23–48. https://doi.org/10.1177/0162353215624164

Ferreira, M., Cardoso, A. P., & Abrantes, J. L. (2011). Motivation and relationship of the student with the school as factors involved in the perceived learning. *Procedia - Social and Behavioral Sciences, 29*, 1707–1714. https://doi.org/10.1016/j.sbspro.2011.11.416

Fletcher, J. M. (2009). Is identification with school the key component in the 'black box' of education outcomes? Evidence from a randomized experiment. *Economics of Education Review, 28*(6), 662–671. https://doi.org/10.1016/j.econedurev.2009.01.007

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research*, *74*(1), 59-109.

Garn, A. C., Cothran, D. J., & Jenkins, J. M. (2011). A qualitative analysis of individual interest in middle school physical education: Perspectives of early-adolescents. *Physical Education & Sport Pedagogy, 16*(3), 223–236. https://doi.org/10.1080/17408989.2010.532783

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, *30*(1), 79-90.

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. https://doi.org/10.3390/su15076039

Hansen, W. B. (2021). Adolescent values, interest in extracurricular activities and bonding to school: A cross-sectional descriptive and correlational analysis. *Journal of Character Education, 17*(1), 21–35.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). The Guilford Press.

Hidi, S., & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist, 41*(2), 111–127. https://doi.org/10.1207/s15326985ep4102_4

Kara, F. M., Kazak, F. Z., & Aşçı, F. H. (2018). Algılanan öğretmen geribildirim ölçeği: Geçerlik ve güvenirlik çalışması. *Spor Bilimleri Dergisi, 29*(2), 79–86. https://dergipark.org.tr/en/pub/sbd/issue/38734/306544

Karasar, N. (2022). *Bilimsel araştırma yöntemi: Kavramlar, ilkeler, teknikler* (36. baskı). Nobel Yayıncılık.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.

Koka, A., & Hein, V. (2003). Perceptions of teachers' feedback and learning environment as predictors of intrinsic motivation in physical education. *Psychology of Sport and Exercise, 4*(4), 333–346. https://doi.org/10.1016/S1469-0292(02)00012-2

Koka, A., & Hein, V. (2005). The effect of perceived teacher feedback on intrinsic motivation in physical education. *International Journal of Sport Psychology, 36*(2), 91–106. https://kodu.ut.ee/~vello/1.pdf

Lobo, J., Peralta, R., Prevandos, F. G., Bautista, C., Agupitan, J., & Mabolo, J. G. (2023). The importance of individual interest and school engagement to the advancement of physical culture promotion in schools of higher education. *Health, Sport, Rehabilitation, 9*(3), 24–39. https://doi.org/10.58962/HSR.2023.9.3..24-39

Miller, K., Wakefield, J., & Sani, F. (2018). Identification with the school predicts better mental health amongst high school students over time. *Educational and Child Psychology, 35*(2), 21–30. https://www.researchgate.net/publication/328942485

Mitchell, R. M., Kensler, L., & Tschannen-Moran, M. (2018). Student trust in teachers and student perceptions of safety: Positive predictors of student identification with school. *International Journal of Leadership in Education, 21*(2), 135–154. https://doi.org/10.1080/13603124.2016.1157211

Montañana, A. S., Serrano, M. H. G., Campos, C. P., & Tafalla, A. M. G. (2022). Análisis de las variables relacionadas con el interés por la educación física en el alumnado de educación secundaria: ¿Cómo fomentarlo? *Retos: Nuevas Tendencias en Educación Física, Deporte y Recreación*, (46), 378–385. https://doi.org/10.47197/retos.v45i0.90164

Monteiro, V., Carvalho, C., & Santos, N. N. (2021). Creating a supportive classroom environment through effective feedback: Effects on students' school identification and behavioral engagement. *Frontiers in Education, 6*, Article 661736. https://doi.org/10.3389/feduc.2021.661736

Mouratidis, A., Vansteenkiste, M., Lens, W., & Sideridis, G. (2008). The motivating role of positive feedback in sport and physical education: Evidence for a motivational model. *Journal of Sport and Exercise Psychology, 30*(2), 240–268. https://doi.org/10.1123/jsep.30.2.240

Nicaise, V., Bois, J. E., Fairclough, S. J., Amorose, A. J., & Patrick, S. R. (2007). Girls' and boys' perceptions of physical education teachers' feedback: Effects on performance and psychological responses. *Journal of Sports Sciences, 25*(8), 915–926. https://doi.org/10.1080/02640410600908066

Obermeier, R., Schlesier, J., & Heinrichs, K. (2024). The mediating role of social relationships between perceived classroom management and adolescents' attitudes toward school: A multilevel analysis. *European Journal of Psychology of Education, 39*(4), 4647–4670. https://doi.org/10.1007/s10212-024-00894-7

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879–891. https://doi.org/10.3758/BRM.40.3.879

Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 3–19). Springer. https://doi.org/10.1007/978-1-4614-2018-7_1

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Sağın, A. E. (2022). The role of gender in predicting life satisfaction of the interest in physical education lesson. *Pedagogy of Physical Culture and Sports*, 26(2), 83-92. https://doi.org/10.15561/26649837.2022.0202

Ściślak, M., Rokita, A., & Popowczak, M. (2013). Secondary school students' interest in various forms of physical activity. *Human Movement, 14*(1), 11–19. https://doi.org/10.2478/v10038-012-0049-7

Uğraş, S., & Temel, C. (2020). Beden eğitimi dersine ilgi ölçeği (BEDİÖ): Geçerlik ve güvenilirlik çalışması. *Gaziantep Üniversitesi Spor Bilimleri Dergisi, 5*(4), 413–427.

Voelkl, K. E. (1996). Measuring students' identification with school. *Educational and Psychological Measurement, 56*(5), 760–770. https://doi.org/10.1177/0013164496056005003

Voelkl, K. E. (2012). School identification. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 193–218). Springer. https://doi.org/10.1007/978-1-4614-2018-7_9