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EDITED BY Manuel Gómez-López, University of Murcia, Spain

REVIEWED BY
Cristina Mª García-Fernández,
University of Cordoba, Spain
Adam Keath,
Mercer University, United States

*CORRESPONDENCE
Mahmood Sindiani

☑ mahmoods@l-w.ac.il

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The motivation of physical education college students to become teachers after graduation

Mahmood Sindiani* and Sharon Tsuk

Levinsky-Wingate Academic College, Netanya, Israel

Purpose: This study examines the motivations and reservations of undergraduate Physical Education Teacher Education (PETE) students regarding their future careers as schoolteachers and identify key factors influencing their career intentions.

Method: A repeated cross-sectional survey utilized data from 443 PETE students across four academic years. Surveys included both quantitative and qualitative questions, administered at two time points within an academic year.

Results: Findings revealed that 69% of participants expressed interest in teaching; however, this declined significantly among upper-year students. No differences emerged between the two data collection points. Factors such as personal satisfaction, economic concerns, and perceived support systems influenced the motivation to become schoolteachers.

Discussion/conclusion: The integration of findings highlights the need for enhanced teacher education programs, focusing on professional development and realistic career previews. These findings aim to refine curricula and support the preparation of dedicated PE teachers.

KEYWORDS

professional development, economic stability, teaching commitment, career sustainability, physical education teacher education (PETE)

Introduction

Physical education (PE) plays a critical role in fostering a lifelong commitment to physical activity and promoting overall health in students. In an era where sedentary lifestyles and related health issues such as obesity, cardiovascular disease, and mental health concerns are increasingly prevalent among children and adolescents, the role of PE teachers is becoming more crucial. PE programs have been shown to improve not only physical fitness but also academic performance, social skills, and emotional wellbeing [Centers for Disease Control and Prevention (CDC), 2011; SHAPE America, 2016; Trudeau and Shephard, 2008].

Teachers of physical education not only deliver knowledge but also inspire students to adopt healthy habits, motivate them to explore their physical potential, and support their journey toward a balanced and active life. The motivation to pursue a career in physical education often stems from a desire to make a positive impact on the wellbeing of young people, shaping their outlook on health and fitness from an early age (Ntoumanis et al., 2021; Ryan and Deci, 2020; Van den Berghe et al., 2014; Wang and Wang, 2023).

The decision to become a physical education teacher is often rooted in experiences long before college, particularly during students' own K-12 schooling. Foundational research

on occupational socialization highlights the significant influence of prior PE experiences, including interactions with inspiring or discouraging teachers, perceived competence, and enjoyment in school-based physical activity (Templin and Schempp, 1989; Richards and Templin, 2012). While the formal pursuit of a career in physical education often begins with choosing a PETE program in higher education, this decision is typically shaped by earlier encounters with the subject. Once enrolled in PETE programs, students' motivation is influenced by interest, engagement during academic studies, and their anticipated satisfaction in school teaching roles. Several distinct groups experience key motivational dynamics: prospective students contemplating career choices; current PETE students who require ongoing motivation to persist and succeed; and in-service teachers evaluating whether to remain in the profession, where motivation plays a crucial role in teacher retention and job satisfaction (Gu and Day, 2007; Wang and Wang, 2023).

The motivation of Physical Education Teacher Education (PETE) students to become PE teachers is multifaceted. Understanding these motivational factors can enhance educational programs and support systems that prepare and sustain future PE teachers effectively. Research into PETE students' motivations reveals a diverse range of intrinsic and extrinsic factors. Intrinsic motivation often stems from a passion for teaching and a desire to work with children (Ralph and MacPhail, 2015; Zhang, 2021). Extrinsic motivation, on the other hand, is influenced by factors such as job stability, salary, career progression opportunities, and other job benefits (Koka and Hagger, 2010; Lee and Park, 2024; Li et al., 2024; Rong et al., 2024; Wang and Wang, 2023; Zhang, 2021). Past PE school experiences, whether positive or negative, significantly influence the decision to become a PE teacher. Some individuals seek to improve PE for future generations to prevent negative experiences similar to their own (Erturan, 2021), while others are motivated by their positive experiences and a passion for sports (Bodart et al., 2019; Wang and Wang, 2023). Furthermore, PE teachers often develop deep emotional connections to sports, which significantly influence their content selection and teaching practices (Ferry and McCaughtry, 2013). These biographical experiences, particularly in rural settings, shape professional identities and pedagogical approaches (Amorim and Silva, 2022; Mooney and Hickey, 2016; Virta et al., 2019).

Recent studies provide further insights into the motivation of PE teachers. Franco et al. (2024) conducted a comprehensive review examining motivational behaviors in PE teachers using achievement and self-determination theories. Their findings emphasize the importance of autonomy-supportive teaching strategies in fostering sustained motivation among educators. Similarly, Garn et al. (2024) developed and validated a questionnaire to assess PE teachers' motivation based on expectancy-value theory, highlighting key factors influencing career commitment and satisfaction. Additionally, Abós et al. (2019) explored the relationship between motivation levels and job satisfaction, revealing that higher intrinsic motivation correlates with lower emotional burnout among PE teachers.

Furthermore, a major limitation in previous studies is the lack of a clearly articulated theoretical framework guiding research on teacher motivation. A critical review by Franco et al. (2024) emphasized that robust theoretical foundations, such as Self-Determination Theory (SDT) and Expectancy-Value Theory (EVT), are essential to ensure the validity and applicability of research findings. Studies that do not employ established motivational theories risk producing fragmented or inconsistent conclusions that fail to contribute meaningfully to the broader academic discourse.

To address this limitation, the present study explicitly grounds itself in SDT (Deci and Ryan, 2000) and EVT (Eccles and Wigfield, 2002), applying them systematically throughout the research process. The development of the survey instrument was directly informed by these frameworks: items were designed to assess key constructs from SDT autonomy, competence, and relatedness and from EVT, including expectancy for success, intrinsic value, attainment value, and utility value. Each item was mapped to its corresponding construct to ensure theoretical alignment and content validity.

Moreover, these same theoretical constructs were used to code and interpret the open-ended qualitative responses provided by participants. For example, responses referencing personal growth or enjoyment of teaching were categorized under intrinsic value (EVT) or autonomy (SDT), whereas statements related to perceived competence or external recognition were coded under competence or utility value. This dual application of theory both in the construction of the research tools and in the interpretation of data enhances the rigor, transparency, and coherence of the study's methodology and findings.

This theoretical foundation aligns with contemporary research practices and strengthens the study's contribution to the field by offering a structured, theory-informed understanding of PETE students' motivation.

Gender differences and academic year variations play a significant role in shaping PETE students' motivation. Studies indicate that female students tend to be more intrinsically motivated than males, showing a stronger internal drive for personal fulfillment in teaching (Spittle et al., 2009; Standage et al., 2005; Van den Berghe et al., 2014). In contrast, 3rd-year students often exhibit lower motivation levels, possibly due to burnout or disillusionment as they advance through their training (Spittle et al., 2009; Standage et al., 2005).

Developing pedagogical mastery is central to the motivation of PETE students. This includes fostering positive motivation toward acquiring teaching skills, ensuring continuity in training, and integrating innovative educational technologies (Van den Berghe et al., 2014; Yoon et al., 2023). Effective PETE programs should cultivate both intrinsic and extrinsic motivation among students, promoting a passion for teaching and a deep understanding of how effective teaching impacts students' lives. Creating a supportive and inclusive learning environment is also essential (Ryan and Deci, 2020; Calderón et al., 2020; McCullick et al., 2012; Wilkinson et al., 2014).

Continuous, hands-on teaching experiences are critical and should be structured progressively, allowing students to apply theoretical knowledge in real-world settings. Professional development should not end with graduation. Effective PETE programs instill a commitment to lifelong learning, encouraging teachers to update their skills through workshops, conferences, and advanced courses (Castelli et al., 2013; Eirín-Nemiña et al., 2022; Martin et al., 2008). Sustained motivation among PE

teachers is closely linked to ongoing professional development (Abós et al., 2019).

Studies on PETE student motivation provide valuable insights into the factors influencing their attitudes toward academic work and career satisfaction. Research from Ukraine highlights stable motives for engaging in educational activities, underscoring the role of intrinsic motivation in sustaining career satisfaction over time (Kuśnierz et al., 2020). In contrast, studies from Russia reveal that many PETE students express dissatisfaction with their chosen profession despite initially perceiving it as the right career choice (Arkhipova et al., 2019).

In Israel, similar to other countries, studies on teacher motivation reveal various insights into the factors influencing their attitudes and career aspirations. However, to our knowledge, no study have specifically examined PETE students' motivation. Thus, the present study examines the motivation of PETE students to become schoolteachers in the future, focusing on identifying intrinsic and extrinsic factors such as gender and academic year that influence their motivation.

Methods

This study utilized a repeated cross-sectional design to examine the motivation of PETE students in an academic college setting at two distinct time points. Although data were collected at multiple points, participant responses were anonymous and distributed through social media platforms, preventing the identification or tracking of individuals across time. Therefore, the samples at each time point were treated as independent, and the study does not constitute a repeated-measures design in the strict methodological sense.

A mixed-methods approach was employed, incorporating both quantitative and qualitative methodologies to provide a comprehensive analysis of PETE students' motivations. The quantitative component included structured survey responses aligned with established motivational theories, while the qualitative component involved open-ended responses that offered deeper insight into personal and contextual motivational factors.

Participants

The study included 443 PETE students (50.3% female) from a teaching education academic college (Bachelor level). Participants ranged in age from 18 to 35 years and represented all 4 years of the program: 1st year (N=164), 2nd year (N=85), 3rd year (N=98), and 4th year (N=96). Data were collected at two points during the academic year: at the beginning (N=214, 47.7% female): 1st year: N=95, 2nd year: N=29, 3rd year: N=45 and 4th year: N=45 and at the end (N=229, 52.8% female): 1st year: N=69, 2nd year: N=56, 3rd year: N=53 and 4th year: N=51.

Questionnaire design

The study employed a brief but theory-informed structured questionnaire aimed at capturing PETE students' motivation

to pursue a teaching career. The instrument comprised one close-ended question and one open-ended question, both designed in alignment with key motivational theories Self-Determination Theory (SDT) and Expectancy-Value Theory (EVT). The closed-ended question was: "Are you interested in becoming a teacher in the future?" Participants selected from the following six response options:1 (Yes), 2 (Yes, probably), 3 (Probably not), 4 (Definitely not), 5 (Undecided), and 6 [Other: (please specify)].

To enrich this categorical response and allow deeper exploration of students' underlying motives, the open-ended question invited participants to elaborate on their reasoning: "Explain why you are interested or not interested in becoming a teacher in the future."

Despite the minimalistic structure, the open-ended responses provided rich qualitative data reflecting psychological, social, economic, and professional considerations, which were analyzed thematically based on constructs from SDT (e.g., autonomy, competence, relatedness) and EVT (e.g., value, expectancy, perceived cost). This integration ensured that both the quantitative distribution of intent and the qualitative rationale were interpreted through a theoretically grounded lens.

To ensure content validity and clarity, the questionnaire was reviewed and validated by five senior faculty members with expertise in physical education and teacher education. Their feedback helped refine the wording of both questions to ensure alignment with motivational theory and relevance to the target population.

Although the instrument was concise by design, it allowed for a focused yet meaningful analysis of PETE students' career motivations within a robust theoretical framework. This approach balances brevity and depth, offering a clear and replicable model for similar studies seeking to explore motivation using both structured and open-response formats.

Procedure

The survey was administered online via targeted social media platforms (emails, Facebook, and WhatsApp groups) and was distributed exclusively through official channels associated with the academic college's PETE program. This ensured that only currently enrolled PETE students were reached and invited to participate, minimizing the likelihood of responses from individuals outside the intended population. Before accessing the survey, participants were presented with a detailed digital informed consent statement outlining the purpose of the study, the voluntary nature of participation, the anonymous handling of responses, and their right to withdraw at any time without consequences. Participants could only proceed to the survey after explicitly clicking a button indicating their agreement to participate. This action served as their informed consent. Additionally, since the study population consisted solely of higher education students enrolled in the PETE program, all of whom are adults (aged 18 and above), no minors were eligible to participate. Ethical approval for the study was granted by the Institutional Review Board (approval No. 427/23), and all procedures complied with national and institutional ethical guidelines for research involving human participants.

Statistical analysis

All quantitative analyses were performed using IBM SPSS Statistics version 27. Descriptive statistics, including frequencies and percentages, were calculated to present an overview of students' motivation to pursue a teaching career.

To facilitate interpretation, responses to the motivation question ("Do you intend to become a teacher in the future?") were recoded into three categories: "Yes" (combining "Yes, for sure" and "Probably yes"), "No" (combining "Probably not" and "No, for sure"), and "I don't know." This recoding enabled more robust statistical comparisons across subgroups.

Chi-square (χ^2) tests were used to assess group differences in motivation levels by academic year, gender, and data collection time point (beginning vs. end of the academic year). These tests helped identify significant shifts in motivational patterns across demographic and temporal variables.

To analyze the qualitative data obtained from the openended responses, a thematic analysis was employed, following Braun and Clarke's (2006) six-step process: (1) familiarization with the data, (2) generation of initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. An inductive approach was used, allowing themes to emerge directly from participants' statements rather than being pre-imposed by existing theoretical constructs.

Two researchers independently coded the data to ensure objectivity and depth. After initial coding, they compared their analyses and resolved any discrepancies through collaborative discussion. This process enhanced intercoder reliability and strengthened the trustworthiness of the findings. Three overarching themes were identified: psychological considerations (e.g., personal fulfillment, sense of purpose), economic considerations (e.g., financial stability, income concerns), and professional considerations (e.g., job conditions, respect for the profession).

Finally, the integration of qualitative and quantitative results was achieved through triangulation, enabling a comprehensive interpretation of the data. This methodological integration supported the consistency of findings and reinforced the validity of the study's conclusions regarding the motivation of PETE students.

Results

The quantitative results regarding students' responses to the question of whether they intend to become teachers indicate that 35.0% (n=155) answered "Yes, for sure," 33.9% (n=150) answered "Probably yes," 10.6% (n=47) answered "I don't know," 13.8% (n=61) answered "Probably not," and 6.8% (n=30) answered "No, for sure" (Table 1).

To facilitate a more interpretable analysis, responses were grouped into three broader categories: "Yes" (including "Yes, for sure" and "Probably yes"), "No" (including "Probably not" and "No, for sure"), and "I don't know." Within the overall sample of 443 participants, 69% were classified into the "Yes" group, 20.4% into the "No" group, and 10.6% remained undecided (Table 1).

Comparison across academic years

A significant difference was observed between 1st-year and 4th-year students in their intent to become teachers $[\chi^2(4)]$ = 39.30, p < 0.000]. First-year students exhibited a stronger inclination toward teaching, with 76.8% selecting "Yes," 11% selecting "No," and 12.2% remaining undecided. Second-year students demonstrated similar distributions to 1st-year students (Table 1). However, among 4th-year students, a significantly lower percentage responded "Yes," while the proportion of students selecting "No" increased substantially $[\chi^2(2) = 45.67,$ p < 0.000] (Table 1). These findings indicate a decline in motivation to pursue a teaching career as students advance in their academic program. This trend is further supported by the qualitative findings (see Qualitative Findings section), where students who expressed disinterest in teaching frequently cited financial concerns, classroom management challenges, and a perceived lack of prestige in the profession. These responses suggest that as students gain more exposure to the realities of the teaching field, their perceptions and motivations may shift accordingly.

Comparison of motivation over time

A comparison between responses collected at the beginning (N = 214, 47.7% female) and at the end of the academic year (N = 229, 52.8% female) revealed no statistically significant differences in motivation levels. This suggests that short-term academic experiences within a single academic year did not substantially alter students' intentions to become teachers.

Gender differences in motivation

Analysis of gender differences showed no significant variation in motivation levels between male and female students. Both groups exhibited nearly identical distributions, with $\sim\!\!70\%$ responding "Yes," 20% responding "No," and 10% remaining undecided. This finding contrasts prior research suggesting gender-based differences in motivations for teaching careers (Wang, 2023), highlighting the need for further exploration of contextual factors that might influence gender-specific career aspirations in physical education.

Qualitative findings

The open-ended question, "Explain why you are interested or not interested in becoming a teacher in the future," provided deeper insight into students' motivations and concerns. Responses were categorized into themes based on the three response groups: "Yes," "No," and "I don't know."

Among the 69% of students (306 participants) who expressed interest in becoming PE teachers, the dominant themes included a passion for sports and physical activity (48% of "Yes" respondents, n = 147), a sense of mission and desire to contribute to society (35%, n = 107), job stability and career prospects (12%, n = 37),

Academic year	Yes for sure	Probably yes	Probably not	Not for sure	Undecided
First year	71 (43.3)	55 (33.5)	16 (9.8)	2 (1.2)	20 (12.2)
Second year	31 (36.5)	36 (42.4)	4 (4.7)	4 (4.7)	10 (11.8)
Third year	29 (29.6)	38 (38.8)	18 (18.4)	6 (6.1)	7 (7.1)
Fourth year	24 (25)	21 (21.9)	23 (24)	18 (18.8)	10 (10.4)
Total	155 (35.0)	150 (33.9)	61 (13.8)	29 (6.5)	47 (10.6)

TABLE 1 Distribution of participants answers about wanting to become teachers by academic year number of students (percentages).

and inspiration from role models or past educational experiences (5%, n = 15). Representative quotes illustrate these themes, such as "I love sports and want to pass on this love to my students" and "Teaching PE is not just about fitness but also about values and teamwork."

Among the 20.4% of students (90 participants) who were not interested in teaching, the most cited deterrent was financial concerns (53%, n=48), followed by difficulties in classroom management and student behavior (26%, n=23), perceived lack of prestige in teaching (14%, n=13), and personal disinterest in the profession (7%, n=6). Quotes such as "Teachers don't earn enough" and "Disciplining students is stressful and not something I want to deal with" reflect the prevailing concerns.

The 10.6% of undecided students (47 participants) expressed uncertainty regarding career fit (43%, n=20), job conditions and stress (36%, n=17), and external job market considerations (21%, n=10). Their responses indicated hesitation about whether teaching aligns with their long-term career goals.

Discussion and conclusions

The current study examined the motivations of Physical Education Teacher Education (PETE) students to become teachers in the future. The main finding in this study is that 69% of PETE students are interested in becoming PE teachers. One of the key motivations among these students is a strong sense of purpose and the desire to positively impact future generations, reflecting their view of teaching as a calling and an opportunity to enrich the lives of children. This aligns with existing research indicating that teachers frequently enter the profession with altruistic motivations, driven by a deep-seated desire to contribute positively to society (Wang and Wang, 2023; Moss, 2020). Beyond purpose, many students also find personal satisfaction in teaching, particularly in witnessing their students' progress. This feeling of fulfillment aligns with Ryan and Deci's (2020) findings, which emphasize that meeting psychological needs for competence and connection can significantly enhance intrinsic motivation. The joy students derive from interactions with children highlights the intrinsic rewards that sustain their commitment to the profession. Studies show that satisfying the need for relatedness a sense of meaningful connection and interaction with others promotes motivation and yields positive outcomes in educational settings (Ryan and Deci, 2020; Klassen et al., 2012; Poom-Valickis et al., 2017).

Although salary considerations are commonly seen as a potential barrier to entering the teaching profession, the study findings indicate that job stability and benefits such as pensions and vacation time play a meaningful role in supporting PETE students' sense of economic security. This aligns with previous research (Guarino et al., 2006; Liu, 2021), which has shown that job stability, benefits, and overall job satisfaction are critical factors influencing teachers' career decisions. Liu's (2021) findings specifically highlight the interplay between these factors and long-term retention in the profession, adding depth to the understanding provided by Guarino et al. (2006). Policymakers across various regions, such as Latin America, have observed challenges in retaining skilled teachers, underscoring the need for policy reforms to improve work conditions and incentives (Vaillant, 2006; Billingsley, 1993). These findings highlight the global nature of the challenges in teacher retention and stress the importance of creating supportive work environments to address these issues effectively.

In addition to financial security, PETE students appreciate the potential for flexible work hours and school holidays, which allow for a more balanced work-life dynamic. Balancing personal life with professional responsibilities is particularly important given the unique demands teachers face inside and outside the classroom. Research highlights the significance of work-life balance in promoting job satisfaction and retention among teachers (Wang, 2023; Eloor and Menon, 2024). A balanced workload contributes not only to personal wellbeing but also to classroom effectiveness. Some studies have shown a positive correlation between job satisfaction and work-life balance (Sorensen and McKim, 2014; Nilsson et al., 2017). Effective management of work hours and support from school administration are essential factors in reducing stress and enhancing job satisfaction (Wang, 2023; Nilsson et al., 2017).

Another key factor is professional development. The study revealed that students feel a need for career advancement opportunities and continuous learning. This is crucial considering the quantitative finding that teaching interest tends to decline among upper-year students, possibly due to perceived limitations in career growth (Pulis, 2024). These insights are supported by literature indicating that professional development is essential for maintaining teacher motivation and effectiveness (Abu-Tineh et al., 2023; Brill and McCartney, 2008). Research underscores the importance of professional growth and clear career advancement pathways as integral to sustaining teachers' engagement and reducing attrition rates. This is especially true in rural and remote

areas, where providing access to mentoring and career development opportunities can address teachers' professional needs (Koerber et al., 2023).

Interestingly, the study found a similar distribution of responses between male and female PETE students regarding their interest in teaching, indicating that motivations and challenges are largely consistent across genders. This suggests that a sense of purpose, personal fulfillment, and economic security are universal across genders, supporting research that highlights shared core motivations among male and female teachers (Standage et al., 2005). However, other studies have shown that gender differences emerge in response to specific motivational factors, with females typically placing higher emphasis on intrinsic values and males on extrinsic ones (Azman, 2013; Giersch, 2021). These findings reveal that while fundamental motivations for teaching may be similar, there are subtle differences in how male and female students respond to certain aspects of the profession.

This study offers valuable insights into the motivations and challenges that influence PETE students' career decisions. The findings indicate that intrinsic motivations, such as a passion for sports, a strong sense of purpose, and the desire to impact future generations, play a critical role in students' decisions to pursue teaching. These motivations align with existing research emphasizing the importance of psychological needs, such as competence, autonomy, and relatedness, in sustaining teacher engagement (Ryan and Deci, 2020). However, extrinsic factors, including financial concerns, job stability, and career advancement opportunities, also significantly affect students' perceptions of the profession.

The study highlights a concerning trend: motivation to enter the teaching profession declines among students in their later academic years. This shift suggests that exposure to the realities of the profession, including concerns about salary, workload, and classroom management, may influence students' long-term commitment. These findings underscore the need for targeted interventions, such as enhanced mentoring programs, professional development opportunities, and policy reforms aimed at improving work conditions for teachers. Addressing these concerns could help sustain motivation and retention rates among future educators.

Despite its contributions, the study has limitations. The sample, drawn from a single teacher education college in Israel, may not be fully representative of PETE students in other institutions or regions. Future research should expand the sample size and include diverse educational contexts to enhance the generalizability of the findings. Additionally, the reliance on self-reported data introduces potential biases, such as social desirability effects. Incorporating longitudinal designs and observational methods could provide a more comprehensive understanding of how motivations evolve over time.

In conclusion, while many PETE students are intrinsically motivated to become teachers, external challenges pose significant barriers. Policymakers and educators must work together to create supportive environments that foster long-term commitment and job satisfaction in the teaching profession.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by the Levinsky-Wingate Academic College Review Board (approval No. 427/23). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

MS: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. ST: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

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Conflict of interest

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The author(s) declare that no Gen AI was used in the creation of this manuscript.

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References

- Abós, Á., Haerens, L., Sevil-Serrano, J., Morbée, S., Julián, J. A., and García-González, L. (2019). Does the level of motivation of physical education teachers matter in terms of job satisfaction and emotional exhaustion? A person-centered examination based on self-determination theory. *Int. J. Environ. Res. Public Health* 16:2839. doi: 10.3390/jierph16162839
- Abu-Tineh, A., Romanowski, M. H., Chaaban, Y., Alkhatib, H., Ghamrawi, N., and Alshaboul, Y. M. (2023). Career advancement, job satisfaction, career retention, and other related dimensions for sustainability: a perception study of qatari public school teachers. *Sustainability* 15:4370. doi: 10.3390/su15054370
- Amorim, C., and Silva, E. R. (2022). Professional identity in physical education: a review of literature. *Retos* 46, 774–788. doi: 10.47197/retos.v46.94479
- Arkhipova, M. V., Belova, E. E., Gavrikova, Y. A., and Mineeva, O. A. (2019). "Research on teacher career motivation in the russian pedagogical university context," in *The International Conference Going Global through Social Sciences and Humanities* (Cham: Springer International Publishing), 105–115. doi: 10.1007/978-3-030-11473-2_13
- Azman, N. (2013). Choosing teaching as a career: perspectives of male and female Malaysian student teachers in training. *Eur. J. Teach. Educ.* 36, 113–130. doi: 10.1080/02619768.2012.678483
- Billingsley, B. S. (1993). Teacher retention and attrition-in special and general education: a critical review of the literature. *J. Spec. Educ.* 27, 137–174. doi: 10.1177/002246699302700202
- Bodart, M., Cauchie, D., and Bruyninckx, M. (2019). "Motivations and job representations of prospective physical education teachers starting their vocational training," in *International Conference on Education and New Developments 2019*. doi: 10.36315/2019v1end064
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. Qual. Res. Psychol. 3, 77–101. doi: 10.1191/1478088706ap0630a
- Brill, S., and McCartney, A. (2008). Stopping the revolving door: increasing teacher retention. *Politics Policy* 36, 750–774. doi: 10.1111/j.1747-1346.2008.00133.x
- Calderón, A., Merono, L., and MacPhail, A. (2020). A student-centred digital technology approach: the relationship between intrinsic motivation, learning climate and academic achievement of physical education pre-service teachers. *Eur. Phys. Educ. Rev.* 26, 241–262. doi: 10.1177/1356336X19850852
- Castelli, D. M., Centeio, E. E., and Nicksic, H. M. (2013). Preparing educators to promote and provide physical activity in schools. *Am. J. Lifestyle Med.* 7, 324–332. doi: 10.1177/1559827613490488
- Centers for Disease Control and Prevention (CDC) (2011). Physical activity levels of high school students—United States, 2010. Morb. Mortal. Wkly. Rep. 60, 773–777.
- Deci, E. L., and Ryan, R. M. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychol. Inq.* 11, 227–268. doi: 10.1207/S15327965PLI1104_01
- Eccles, J. S., and Wigfield, A. (2002). Motivational beliefs, values, and goals. annual. *Rev. Psychol.* 53, 109–132. doi: 10.1146/annurev.psych.53.100901.135153
- Eirín-Nemiña, R., Sanmiguel-Rodríguez, A., and Rodríguez-Rodríguez, J. (2022). Professional satisfaction of physical education teachers. *Sport Educ. Soc.* 27, 85–98. doi: 10.1080/13573322.2020.1816540
- Eloor, A. G., and Menon, D. S. (2024). The work-life balance of teachers: a review. *Int. J. Res. Manag.* 6, 52–56. doi: 10.33545/26648792.2024.v6.i1a.125
- Erturan, G. (2021). Testing the vallerand's motivational sequence in physical education: the invariance of teachers' motivation to teach. *Int. J. Contemp. Educ. Res.* 8, 1–13. doi: 10.33200/ijcer.810477
- Ferry, M., and McCaughtry, N. (2013). Secondary physical educators and sport content: a love affair. *J. Teach. Phys. Educ.* 32, 375-393. doi: 10.1123/jtpe.32.4.375
- Franco, E., Coterón, J., and Spray, C. (2024). Antecedents of teachers' motivational behaviours in physical education: a scoping review utilising achievement goal and self-determination theory perspectives. *Int. Rev. Sport Exerc. Psychol.* 1–40. doi: 10.1080/1750984X.2024.2366835
- Garn, A. C., Simonton, K. L. Jr., and Mercier, K. (2024). Development and validation of the teacher motivation in physical education questionnaire. *J. Teach. Phys. Educ.* 1, 1–11. doi: 10.1123/jtpe.2023-0335
- Giersch, J. (2021). Motivations to enter teaching: an investigation with non-education university students. J. Educ. Teach. 47, 426–438. doi: 10.1080/02607476.2021.1880870
- Gu, Q., and Day, C. (2007). Teachers resilience: a necessary condition for effectiveness. *Teach. Teach. Educ.* 23, 1302–1316. doi: 10.1016/j.tate.2006.06.006
- Guarino, C. M., Santibanez, L., and Daley, G. A. (2006). Teacher recruitment and retention: a review of the recent empirical literature. *Rev. Educ. Res.* 76, 173–208. doi: 10.3102/003465430 76002173

- Klassen, R. M., Perry, N. E., and Frenzel, A. C. (2012). Teachers' relatedness with students: an underemphasized component of teachers' basic psychological needs. *J. Educ. Psychol.* 104:150. doi: 10.1037/a0026253
- Koerber, N., Marquez-Mendez, M., Mensah, A., Fasching-Varner, K., and Schrader, P. G. (2023). Sustaining teacher needs: a systematic narrative review exploring teacher retention, attrition, and motivation. *Lit. Rev. Educ. Hum. Serv.* 2, 1–20. Available online at: https://www.tamuc.edu/wp-content/uploads/2023/08/Sustaining-Teacher-Needs.pdf
- Koka, A., and Hagger, M. S. (2010). Perceived teaching behaviors and self-determined motivation in physical education: a test of self-determination theory. Res. Q. Exerc. Sport 81, 74–86. doi: 10.1080/02701367.2010.105
- Kuśnierz, C., Rogowska, A. M., and Pavlova, I. (2020). Examining gender differences, personality traits, academic performance, and motivation in Ukrainian and Polish students of physical education: a cross-cultural study. *Int. J. Environ. Res. Public Health* 17:5729. doi: 10.3390/ijerph17165729
- Lee, J., and Park, J. (2024). The role of grit in inclusive education: a study of motivation and achievement among preservice physical education teachers. *Front. Psychol.* 15:1332464. doi: 10.3389/fpsyg.2024.1332464
- Li, K., Xu, X., Zhang, Y., and Xu, X. (2024). The influence of environmental factors on the job burnout of physical education teachers in tertiary education. *Sci. Rep.* 14:9126. doi: 10.1038/s41598-024-59748-3
- Liu, J. (2021). Exploring teacher attrition in urban China through interplay of wages and well-being. $Educ.\ Urban\ Soc.\ 53, 807-830.\ doi: 10.1177/0013124520958410$
- Martin, J. J., McCaughtry, N., Kulinna, P., Cothran, D., and Faust, R. (2008). The effectiveness of mentoring-based professional development on physical education teachers' pedometer and computer efficacy and anxiety. *J. Teach. Phys. Educ.* 27, 68–82. doi: 10.1123/jtpe.27.1.68
- McCullick, B. A., Lux, K. M., Belcher, D. G., and Davies, N. (2012). A portrait of the PETE major: re-touched for the early twenty-first century. Phys. Educ. Sport Pedagog. 17, 177–193. doi: 10.1080/17408989.2011.565472
- Mooney, A., and Hickey, C. (2016). "Knowing the rules of the game: rural sporting biographies and their influence on physical education pedagogy," in *Self-studies in Rural Teacher Education* (Cham: Springer International Publishing), 123–138. doi: 10.1007/978-3-319-17488-4_7
- Moss, J. D. (2020). "I was told to find what broke my heart and fix it." college students explain why they want to become teachers. *Cogent Educ.* 7:1734284. doi: 10.1080/2331186X.2020.1734284
- Nilsson, M., Blomqvist, K., and Andersson, I. (2017). Salutogenic resources in relation to teachers' work-life balance. Work 56, 591–602. doi: 10.3233/WOR-172528
- Ntoumanis, N., Ng, J. Y., Prestwich, A., Quested, E., Hancox, J. E., Thøgersen-Ntoumani, C., et al. (2021). A meta-analysis of self-determination theory-informed intervention studies in the health domain: effects on motivation, health behavior, physical, and psychological health. *Health Psychol. Rev.* 15, 214–244. doi: 10.1080/17437199.2020.1718529
- Poom-Valickis, K., Rumma, K., Francesconi, D., and Joosu, K. (2017). "Relations between student teachers' basic needs fulfillment, study motivation, and ability beliefs," in *Paper Presented at the 8th International Conference on Education and Educational Psychology, Portugal, October 11–14.* doi: 10.15405/epsbs.2017.10.74
- Pulis, A. (2024). Teaching as a prospective career: motivators and disincentives. *Malta J. Educ.* 4, 86–109. doi: 10.62695/WAIT3688
- Ralph, A. M., and MacPhail, A. (2015). Pre-service teachers' entry onto a physical education teacher education programme, and associated interests and dispositions. *Eur. Phys. Educ. Rev.* 21, 51–65. doi: 10.1177/1356336X14550940
- Richards, K. A. R., and Templin, T. J. (2012). Toward a multidimensional perspective on teacher-coach role conflict. *Quest* 64, 164–176. doi: 10.1080/00336297.2012.693751
- Rong, L., Nasruddin, E., and Siqi, H. (2024). A systematic review on the influence factors on teachers' work motivation and job satisfaction at universities. *Int. J. Adv. Res. Educ. Soc.* 6, 20–33.
- Ryan, R. M., and Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: definitions, theory, practices, and future directions. *Contemp. Educ. Psychol.* 61:101860. doi: 10.1016/j.cedpsych.2020.101860
- SHAPE America (2016). Shape of the Nation: Status of Physical Education in USA. Reston, VA: Society of Health and Physical Educators.
- Sorensen, T. J., and McKim, A. J. (2014). Perceived work-life balance ability, job satisfaction, and professional commitment among agriculture teachers. *J. Agric. Educ.* 55, 116–132. doi: 10.5032/jae.2014.04116
- Spittle, M., Jackson, K., and Casey, M. (2009). Applying self-determination theory to understand the motivation for becoming a physical education teacher. *Teach. Teach. Educ.* 25, 190–197. doi: 10.1016/j.tate.2008.07.005

Standage, M., Duda, J. L., and Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *Br. J. Educ. Psychol.* 75, 411–433. doi: 10.1348/000709904X22359

Templin, T. J., and Schempp, P. G. (1989). Socialization Into Physical Education: Learning to Teach. Benchmark Press.

Trudeau, F., and Shephard, R. J. (2008). Physical education, school physical activity, school sports and academic performance. *Int. J. Behav. Nutr. Phys. Act.* 5, 1–12. doi: 10.1186/1479-5868-5-10

Vaillant, D. (2006). Atraer y retener buenos profesionales en la profesión docente: políticas en Latinoamérica. *Rev. Educ.* 340, 117–140. Available online at: https://www.educacionfpydeportes.gob.es/revista-de-educacion/numeros-anteriores/2006/re340/re340-04.html

Van den Berghe, L., Vansteenkiste, M., Cardon, G., Kirk, D., and Haerens, L. (2014). Research on self-determination in physical education: key findings and proposals for future research. *Phys. Educ. Sport Pedagog.* 19, 97–121. doi: 10.1080/17408989.2012.732563

Virta, J., Hökkä, P., Eteläpelto, A., and Rasku-Puttonen, H. (2019). Professional identity among student teachers of physical education: the role

of physicality. Eur. J. Teach. Educ. 42, 192-210. doi: 10.1080/02619768.2019.15 76628

Wang, W., and Wang, Z. (2023). Why choose a career in teaching? Exploring motivational factors that influence the decision to teach. *Br. J. Guid. Couns.* 51, 46–57. doi: 10.1080/03069885.2022.2040003

Wang, X. (2023). Exploring issues and solution strategies in balancing the work and life of university teachers. *Acad. J. Humanit. Soc. Sci.* 6, 65–71. doi: 10.25236/AJHSS.2023.061811

Wilkinson, C., Pennington, T., Barney, D., Lockhart, B., Hager, R., and Prusak, K. (2014). PETE students' perceptions of a healthy and active lifestyle. *Phys. Educ.* 71, 644–659. Available online at: https://scholarsarchive.byu.edu/facpub/3028/

Yoon, K., Park, S., and Jung, H. (2023). What makes teachers' professional learning more or less effective? an evolution of community of practice for physical education teachers. *J. Teach. Phys. Educ.* 43, 377–386. doi: 10.1123/jtpe.2023-0005

Zhang, T. (2021). Physical education teacher motivation: a conceptual review and reconceptualisation. *Rev. Educ.* 9:e3301. doi: 10.1002/rev3.3301