



The Role of Learning Motivation on Participation and Effectiveness of Physical Education Learning in Elementary Schools: A Systematic Review

Hesti Dian Ananda^{1A-E*}, Palmizal^{2B-D}, Tri Bayu Norito^{3B-D}, Reza Hadinata^{4B-D}, David Iqroni^{5B-D}
Yonifia Anjanika^{6B-D}

^{1,2,3,4,5,6} Universitas Jambi, Jambi, Indonesia

h.dianananda08@gmail.com^{1*}, palmizal@unja.ac.id², tribayunorito@unja.ac.id³,
reza_hadinata@unja.ac.id⁴, davidigoni@unja.ac.id⁵, yonifia.anjanika@unja.ac.id⁶

ABSTRACT

Learning motivation is a key psychological factor that influences the level of participation and effectiveness of Physical Education, Sports, and Health learning in elementary schools. Various empirical studies have shown that low learning motivation results in minimal active student involvement, low mastery of motor skills, and failure to achieve optimal learning objectives. This study aims to synthesize empirical findings related to the forms of elementary school students' learning motivation, the factors that influence it, and its impact on participation and effectiveness of Physical Education learning in the 2018–2025 period. The method used is a Systematic Literature Review (SLR) with reference to the PRISMA 2020 guidelines. Data analysis was carried out using thematic synthesis techniques by grouping findings into three main themes, namely forms of learning motivation, factors that influence motivation, and the impact of motivation on Physical Education learning. The results of the study indicate that student learning motivation consists of intrinsic and extrinsic motivation, with intrinsic motivation proven to be more dominant and sustainable in encouraging active participation and learning effectiveness. Internal factors such as interest, self-confidence, and perceived competence, as well as external factors such as learning methods, teacher support, and the learning environment, play a significant role in shaping students' learning motivation. This study concludes that learning motivation plays a major role in the success of Physical Education learning in elementary schools and recommends the implementation of innovative, varied, and student-centered learning strategies, as well as the development of further research related to motivation-based pedagogical approaches.

ARTICLE HISTORY

Received: 2026/02/07

Accepted: 2026/02/23

Published: 2026/02/25

KEYWORDS

Learning Motivation;
Student Participation;
Physical Education;
Elementary School;
Systematic Review.

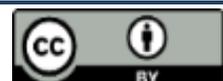
AUTHORS' CONTRIBUTION

- A. Conception and design of the study;
- B. Acquisition of data;
- C. Analysis and interpretation of data;
- D. Manuscript preparation;
- E. Obtaining funding

Cites this Article : Ananda, H.D.; Palmizal, P.; Norito, T.B.; Hadinata, R.; Iqroni, D.; Anjanika, Y. (2026). The Role of Learning Motivation on Participation and Effectiveness of Physical Education Learning in Elementary Schools: A Systematic Review. **Competitor: Jurnal Pendidikan Kepeleatihan Olahraga**. 18 (1), p.1262-1270

INTRODUCTION

Physical Education, Sports, and Health is an integral part of the education system, playing a crucial role in developing physical competence, movement skills, social-emotional maturity, and character development in students. Physical education is not only oriented towards improving physical fitness but also aims to holistically shape



individuals so they can develop physically, mentally, socially, and emotionally, and function optimally in daily life (Andriansyah et al., 2025). In the context of basic education, PE plays a strategic role as the foundation for developing an active lifestyle, a positive attitude toward physical activity, and the ongoing development of basic motor skills through to the next level of education. The success of learning is largely determined by students' active involvement in each learning activity, one of the determining factors of which is learning motivation.

Learning motivation is a psychological factor that influences the direction, intensity, and sustainability of students' learning behavior (Anjanika et al., 2025; Rozi et al., 2023). In learning, motivation serves as the primary driver, determining the extent to which students are willing to actively engage, try new movements, and maintain participation in physical activities that require effort and consistency. Students with high levels of motivation tend to demonstrate enthusiasm, active participation, and better movement quality during the learning process. Conversely, low learning motivation results in minimal student engagement, poor movement quality, and suboptimal achievement of Physical Education learning objectives (Purnomo et al., 2025). Various empirical reports indicate that elementary school students' learning motivation in learning remains in the moderate to low category, characterized by a lack of enthusiasm, a tendency to avoid structured physical activity, and low active participation in learning activities.

Theoretically, the study of learning motivation in education is largely explained through Self-Determination Theory (SDT) proposed by Deci and Ryan. This theory asserts that intrinsic motivation will develop optimally when three basic psychological needs—autonomy, competence, and social connectedness—are met (Deci & Ryan, 2000; Marberliantina et al., 2025). In the context of PE, fulfilling the need for autonomy can be achieved through providing activity choices, the need for competence through movement challenges appropriate to students' abilities, and the need for connectedness through positive social interactions during learning. Intrinsic motivation that is formed through fulfilling these three needs has been proven to be more sustainable in encouraging active student involvement than extrinsic motivation alone.

In addition to SDT, Expectancy-Value Theory also explains that student learning motivation is influenced by individual beliefs in their abilities (expectancy) and the perceived value of learning activities (value) (Wigfield & Eccles, 2000). In physical education (PE) learning, students who feel capable of performing movement activities and perceive these activities as enjoyable and meaningful will demonstrate higher levels of participation. Meanwhile, Achievement Goal Theory emphasizes that learning goal orientation, particularly mastery orientation, is closely related to students' persistence, effort, and active involvement in PE learning (Nicholls, 1989). The integration of these various theoretical perspectives demonstrates that learning motivation in PE is a multidimensional construct influenced by both internal and external factors.

However, PE learning practices in elementary schools are often dominated by instruction-oriented approaches and outcome assessments, placing a greater emphasis

on extrinsic motivation such as grades, praise, or punishment. This approach has the potential to reduce the sustainability of student engagement in the long term and is less conducive to the development of intrinsic motivation (Kharisman, 2025). Several previous studies in Indonesia also reported that monotonous learning methods, a lack of varied activities, and a minimally enjoyable learning environment are the main factors contributing to low student motivation in Physical Education . Conversely, the implementation of a game-based approach, cooperative activities, and enjoyable learning has been shown to significantly increase student motivation and participation (Anjanika et al., 2025; Kurniawan et al., 2025).

Although various studies have examined learning motivation in learning, most of these studies are partial and conducted separately, both in terms of motivational focus, influencing factors, and impact on learning effectiveness. To date, no recent systematic review has been found specifically examining elementary school students' learning motivation in learning, particularly in the publication period 2018–2025. This absence of systematic reviews indicates a research gap that needs to be filled to strengthen the theoretical and empirical foundations for developing motivation-based learning. Therefore, this study aims to analyze the forms of elementary school students' learning motivation, identify factors influencing learning motivation, and synthesize empirical findings related to the role of motivation in participation and effectiveness in learning through a systematic literature review approach.

METHODS

This study used a Systematic Literature Review (SLR) approach, adhering to the PRISMA 2020 guidelines. The study participants did not directly involve subjects, but rather used published empirical research articles. The study population included all research articles discussing elementary school students' learning motivation in the context of Physical Education, Sports, and Health learning.

Articles were selected based on inclusion and exclusion criteria: (1) the article discussed learning in elementary school students, (2) focused on learning motivation, whether intrinsic or extrinsic, (3) was empirical research using a qualitative, quantitative, or mixed methods approach, and (4) was published in Indonesian or English between 2015 and 2025. Articles were excluded if they were not relevant to the context, did not involve elementary school students, or were non-empirical.

The literature search was conducted using Google Scholar and Scopus databases. The initial search yielded 560 articles, which were then selected based on the suitability of the title and abstract, resulting in 24 articles. Further selection based on inclusion and exclusion criteria resulted in seven articles deemed suitable and relevant for further analysis. The entire selection process followed the PRISMA 2020 flowchart.

Data analysis was conducted using the Thematic Synthesis technique, referring to the framework of Afandi et al., (2025). The analysis process included coding key findings, grouping codes into categories, and synthesizing categories into key themes. The

synthesis results were classified into three themes: (1) forms of student learning motivation, (2) factors influencing learning motivation, and (3) the impact of learning motivation on participation and effectiveness of physical education learning. The findings are presented narratively to provide a comprehensive overview of the role of learning motivation in physical education learning in elementary schools.

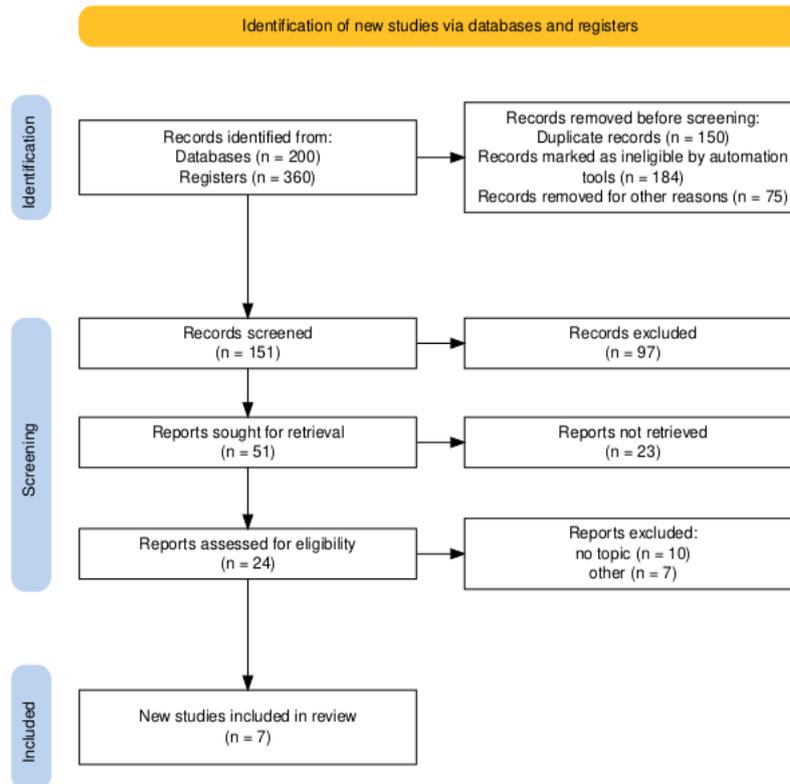


Figure 1.
 Identification of New Studies Via Database and Register

RESULTS AND DISCUSSION

Result

This section presents the results of a synthesis of seven empirical research articles selected through a systematic selection process based on the PRISMA 2020 guidelines. The articles are from reputable national and international journals and were published between 2018 and 2025. All studies analyzed focused on student learning motivation in the context of Physical Education, Sports, and Health learning in elementary schools and early secondary education as a comparative reference.

The results were analyzed using a thematic synthesis approach and classified into three main themes: (1) forms of student learning motivation in learning, (2) factors influencing student learning motivation, and (3) the impact of learning motivation on participation and effectiveness of learning. The results are presented in a structured manner through article summary tables and narrative descriptions to provide a comprehensive overview of the patterns of findings, similarities, and differences between the studies.

Table 1.
 Characteristics and Main Findings of the Analyzed Articles

No	Author (Year)	Research Context & Subject	Focus Motivation	Key Findings
1	Gordeeva et al., (2018)	Elementary school students; innovative and traditional educational approaches	Intrinsic & extrinsic motivation	Innovative learning approaches result in more positive learning motivation profiles and perceptions of the learning environment; intrinsic and extrinsic motivation act as learning mediators.
2	Kalajas-Tilga et al., (2020)	Physical Education learning for school-age students	Motivational processes in	Motivation to learn is influenced by age and grade level with a tendency to decrease at higher levels; intrinsic factors are more dominant than gender.
3	Bavcevic et al., (2024)	Students aged 12–15 years in learning	Motivational structure and profile	Intrinsic motivation dominates but declines with age; there are differences in students' motivational profiles that require adaptive and inclusive learning approaches.
4	Hariyanto et al., (2022)	Elementary school students in learning	Motivation to learn & physical activity	Learning motivation and physical activity have a positive and significant influence on the physical fitness of elementary school students.
5	Sugiharto & Husamah, (2024)	Elementary school phase A students	Motivation to learn	Motivation to learn is not optimal due to limited facilities, minimal learning variations, and the stigma of as a non-academic subject.
6	Kusfandari et al., (2022)	Elementary school students in learning	Learning motivation & learning outcomes	Learning motivation has a positive and significant relationship with physical education learning outcomes; internal motivation plays an important role in student activity and discipline.
7	Sotos-Martinez et al., (2023)	Gamification-based elementary school physical education learning	Intrinsic motivation & motivation regulation	Gamification increases intrinsic motivation and external motivation regulation, but is not yet effective in reducing students' overall amotivation levels.

Based on Table 1, it can be concluded that learning motivation is a multidimensional construct that plays a crucial role in Physical Education, Sports, and Health learning for elementary school students. All articles analyzed consistently demonstrate that learning motivation, particularly intrinsic motivation, significantly contributes to active engagement, learning quality, and student learning outcomes. Intrinsic motivation, such as the enjoyment of movement, a sense of challenge, and personal satisfaction, has been shown to be more sustainable in encouraging student participation than temporary extrinsic motivation.

In addition to the form of motivation, the study also confirms that student learning motivation is influenced by various internal and external factors. Internal factors include student interest, age, psychological development, and perceived competence. External factors include learning methods, teacher support, the availability of facilities and infrastructure, and the school learning climate. Several studies have shown a tendency for learning motivation to decrease with increasing age and educational level, indicating the importance of adaptive learning strategies tailored to student developmental characteristics.

Furthermore, research findings demonstrate a strong relationship between learning motivation and the effectiveness of learning, both in the form of improved learning outcomes, physical fitness, and active student participation during the learning

process. The implementation of innovative learning approaches, such as gamification and game-based learning, has been shown to increase students' intrinsic motivation and external motivation regulation. However, several studies also confirm that certain learning interventions are not fully effective in reaching students with very low levels of amotivation, necessitating a more comprehensive and sustainable pedagogical approach.

Overall, this synthesis of research findings confirms that learning motivation is a key factor in determining the quality and effectiveness of physical education (PE) learning in elementary schools. Therefore, the development of PE learning needs to be directed at creating a fun, challenging, and student-centered learning environment to support the development of strong and sustainable intrinsic motivation.

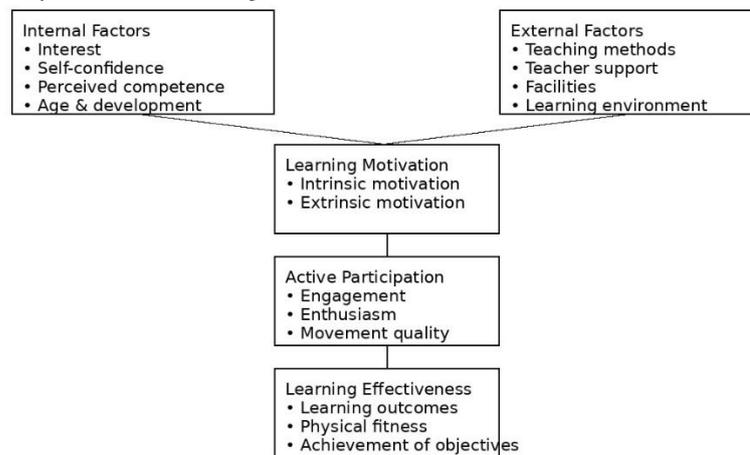


Figure 2.

Thematic Synthesis of Learning Motivation in Physical Education in Elementary Schools

Figure 2 presents the thematic synthesis derived from the selected empirical studies, illustrating the role of learning motivation as a central mediator in physical education learning at the elementary school level. Learning motivation is shaped through the interaction of internal factors, including students' interest, self-confidence, perceived competence, and developmental characteristics, as well as external factors such as teaching methods, teacher support, facilities, and the learning environment. Intrinsic and extrinsic motivation contribute to increased active participation, which is reflected in students' engagement, enthusiasm, and quality of movement during physical education lessons. Enhanced active participation subsequently leads to improved learning effectiveness, including better learning outcomes, physical fitness, and achievement of instructional objectives.

Discussion

The results of this systematic literature review confirm that learning motivation plays a central role in determining the level of participation and effectiveness of Physical Education, Sports, and Health learning in elementary schools. A synthesis of seven research articles shows that learning motivation, particularly intrinsic motivation, contributes significantly to student active engagement, the quality of physical activity

implementation, and the achievement of learning objectives. These findings reinforce the view that successful learning is determined not only by physical and technical aspects, but also by students' psychological factors.

Theoretically, these research findings align with Self-Determination Theory (SDT), which emphasizes the importance of fulfilling basic psychological needs, namely autonomy, competence, and social connectedness, in fostering sustained intrinsic motivation (Deci & Ryan, 2000; Ryan & Deci, 2024). In the context of , students who feel they have the freedom to choose activities (autonomy), are able to perform movements according to their abilities (competence), and receive social support from teachers and peers (connectedness), tend to demonstrate higher intrinsic motivation. This intrinsic motivation encourages students to actively engage, try new activities, and maintain participation in physical education without relying entirely on external stimuli.

Besides SDT, these findings can also be explained through Expectancy-Value Theory, which states that learning motivation is influenced by students' beliefs in their abilities (expectancy) and the value they place on an activity (task value) (Wigfield & Eccles, 2000). In physical education (PE) learning, students who believe they are capable of performing movement activities and perceive them as enjoyable and meaningful demonstrate higher levels of participation. Several analyzed studies indicate that perceived competence and interest are the primary internal factors influencing student learning motivation. Therefore, PE teachers need to design activities appropriate to students' developmental levels and abilities to optimally perceive the value and meaning of learning.

Furthermore, the results of this study are also relevant to Achievement Goal Theory, which distinguishes learning goal orientations into mastery orientation and performance orientation (Nicholls, 1989). Physical Education learning that emphasizes skill mastery, the learning process, and self-improvement tends to foster intrinsic motivation and long-term student engagement. Conversely, learning that focuses too much on outcome assessment and comparisons between students has the potential to increase extrinsic motivation, which is temporary and less sustainable. This finding is reflected in several articles showing that innovative and game-based learning approaches can increase intrinsic motivation and active student participation.

Regarding external factors, the synthesis results indicate that learning methods, teacher support, and the availability of facilities and infrastructure play a significant role in shaping student learning motivation. Monotonous and teacher-centered learning strategies are reported to be among the causes of low motivation in learning , while varied, contextual, and enjoyable learning approaches, such as gamification and game-based learning, have been shown to increase student engagement. However, several studies also confirm that innovative learning interventions are not fully effective in reaching students with very low levels of amotivation, necessitating a more comprehensive and sustainable pedagogical approach.

Another important finding is the tendency for learning motivation to decline with age and educational level. This phenomenon indicates that student learning motivation

is dynamic and influenced by developmental factors, so physical education (PE) learning in elementary schools needs to be designed adaptively and progressively. PE teachers play a strategic role not only as instructors of movement skills but also as facilitators and motivators capable of creating a learning climate that supports the development of students' intrinsic motivation from an early age.

Overall, the results of this study strengthen the empirical and theoretical evidence that learning motivation is a key factor in increasing participation and effectiveness in PE learning in elementary schools. The theoretical implications of this research suggest that the development of PE learning needs to be grounded in strong motivational theories, specifically SDT, Expectancy-Value Theory, and Achievement Goal Theory. Meanwhile, the practical implications emphasize the importance of implementing innovative, varied, and student-centered learning strategies, as well as supporting a conducive learning environment to build sustainable intrinsic motivation.

CONCLUSION

Based on the results of the systematic literature review of seven empirical studies, it can be concluded that learning motivation plays a key role in enhancing student participation and the effectiveness of physical education learning in elementary schools. Learning motivation, particularly intrinsic motivation, significantly contributes to students' active engagement, quality of physical activity, and the achievement of learning outcomes and physical fitness. Learning motivation is shaped by the interaction of internal factors, such as interest, self-confidence, and perceived competence, and external factors, including teaching methods, teacher support, and the learning environment. Therefore, physical education learning should be designed in an innovative, varied, and student-centered manner to foster sustainable intrinsic motivation and support optimal learning effectiveness.

REFERENCES

- Afandi, F., Sabila, N. S., Khumairoh, N., & Mu'alimin, M. (2025). Strategi Penguatan Budaya Mutu di Satuan Pendidikan: Sintesis Temuan Utama dari Literature Review 2020–2025. *Jurnal Manajemen Dan Pendidikan Agama Islam*, 3(5), 200–206.
- Andriansyah, R., Alwasi, M. N. D. I., Ramadhan, F. A., Zahra, E., & Riski, D. M. (2025). Strategi dan Peran Pendidikan Jasmani dan Olahraga dalam Membentuk Karakter Anak Bangsa. *Jurnal Ilmiah Multidisiplin Ilmu*, 2(2), 1–6.
- Anjanika, Y., Ruron, A. T. T., & Muhajir, N. (2025). Efektivitas Active Learning dalam Pendidikan Jasmani Terhadap Peningkatan Kemampuan Motorik Siswa Sekolah Pelosok Nipah Panjang. *Unimuda Sport Journal: Jurnal Pendidikan Jasmani*, 6(1), 1–9.
- Bavcevic, T., Milavić, B., & Bavčević, D. (2024). Motivation for Physical Education in Students Aged 12 to 15–Structure Analysis. *Sport Mont*, 22(3), 31–36.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

- Gordeeva, T. O., Sychev, A., Pshenichnuk, D. V., & Sidneva, A. N. (2018). Academic motivation of elementary school children in two educational approaches—innovative and traditional. *Psychology in Russia: State of the Art*, 11(4), 19–36.
- Hariyanto, D., Kumaat, N. A., & Kristiandaru, A. (2022). Pengaruh Aktivitas Fisik Dan Motivasi Belajar Terhadap Kebugaran Jasmani Siswa SDN Kartoharjo 2 Kab. Magetan. *Bravo's: Jurnal Program Studi Pendidikan Jasmani Dan Kesehatan*, 10(3), 226–237.
- Kalajas-Tilga, H., Koka, A., Hein, V., Tilga, H., & Raudsepp, L. (2020). Motivational processes in physical education and objectively measured physical activity among adolescents. *Journal of Sport and Health Science*, 9(5), 462–471.
- Kharisman, I. (2025). Pengaruh Model Pembelajaran SEM Dalam Meningkatkan Keterlibatan Siswa Dalam Mengikuti Pembelajaran Pjok: Kajian Literatur. *Prosiding Seminar Nasional Prodi Magister Dan Doktoral Pendidikan Olahraga FIK UNNES*, 1(1), 215–233.
- Kurniawan, R., Mahyudi, Y. V., & Sinulingga, A. R. (2025). Efektivitas pembelajaran berbasis permainan terhadap hasil belajar pendidikan jasmani. *Jurnal Pendidikan Jasmani Indonesia*, 21(2), 196–204.
- Kusfandari, R., Erianti, E., Firdaus, K., & Sepriani, R. (2022). Hubungan Motivasi Belajar dengan Hasil Belajar Pendidikan Jasmani Olahraga dan Kesehatan di SDN 30 Air Dingin. *Jurnal JPDO*, 5(7), 123–129.
- Marberliantina, B. N., Doewes, R. I., Miragama, Z. B., & Nugroho, N. A. (2025). Motivasi siswa SMA Negeri di Kota Surakarta pada pembelajaran pendidikan jasmani olahraga dan kesehatan dalam perspektif Self-Determination Theory. *Jurnal Olahraga Pendidikan Indonesia (JOPI)*, 4(2), 103–114.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Harvard University Press.
- Purnomo, K. D., Rizal, R. M., & Rohendi, A. (2025). Peran Guru PJOK dan Motivasi Belajar terhadap Hasil Belajar Siswa Sekolah Dasar. *Jurnal Master Penjas & Olahraga*, 6(1), 636–642.
- Rozi, M. F., Putra, J., Suwirman, S., & Arsil, A. (2023). Motivasi siswa dalam pembelajaran pendidikan jasmani olahraga dan kesehatan (PJOK). *Wahana Didaktika: Jurnal Ilmu Kependidikan*, 21(1), 143–153.
- Ryan, R. M., & Deci, E. L. (2024). Self-determination theory. In *Encyclopedia of quality of life and well-being research* (pp. 6229–6235). Springer.
- Sotos-Martinez, V. J., Tortosa-Martínez, J., Baena-Morales, S., & Ferriz-Valero, A. (2023). Boosting student's motivation through gamification in physical education. *Behavioral Sciences*, 13(2), 165.
- Sugiharto, A., & Husamah, H. (2024). Motivasi peserta didik fase a dalam mengikuti pembelajaran pendidikan jasmani, olahraga, dan kesehatan di sekolah dasar. *Prosiding Seminar Nasional Pendidikan Biologi*, 10(1), 233–237.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81.