



## Motivation in Physical Education: Extrinsic vs Intrinsic Factors

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### Abstract

*The primary emphasis of this study is on the ways in which students' intrinsic and extrinsic incentives impact their level of involvement in physical education classes. The primary objective was to determine which aspects of students' educational experiences were most and least motivating in two distinct educational paths, namely, traditional schooling and professional education. In all, there were 41 students that participated in the study. There were 25 men and 16 females, and their average age was  $16.37 \pm 0.829$  years. The purpose of this study was to investigate the intrinsic (such as enjoyment or personal challenge) and extrinsic (such as grades or peer acceptability) driving forces of students via the use of a structured questionnaire. In spite of the fact that both internal and external variables have an effect on student participation, the findings indicate that intrinsic motivation is more significant in both instructional settings. The underlying reasons of the two groups, on the other hand, were distinct from one another. The study highlights the need of instructors developing intrinsic motivation and identifying the contextual value of extrinsic incentives in the area of physical education. Additionally, it highlights the complexity of motivational dynamics in this particular subject.*

**Keywords:** Intrinsic motivation, Extrinsic motivation, Physical education, Student engagement, Educational pathways,

### INTRODUCTION

Physical education (PE) is essential to the overall development of kids because it helps them develop their physical fitness, mental health, and social connections throughout their academic careers. Motivating factors, on the other hand, have a significant influence on the degree to which students participate in physical education classes, which might vary substantially. A comprehensive knowledge of the factors that encourage students to participate in physical activity—or not—in the context of an educational setting is necessary for the development of



effective teaching strategies and the promotion of habits that promote physical welfare across a lifetime. There are two primary types of motivation that individuals employ while they are working out: internal motivation and extrinsic drive.

The phrase "intrinsic motivation" refers to the kind of motivation that originates from inside an individual, such as the desire to engage in a certain activity because of the fact that you like it or because you have a positive self-image. It is more probable that students who are truly motivated will take an active part, demonstrate tenacity, and feel more successful and autonomous than students who are not driven. Extrinsic motivation, on the other hand, is motivated by circumstances that are not within the control of the person. These influences include things like the expectations of society, the desire to compete, or the belief that bad consequences would occur. Although extrinsic incentives may be effective in increasing compliance or performance in the short term, they will not be sufficient to maintain people's engagement in the long term unless they internalise the motivation.

There are a number of demographic factors that influence the relative relevance of students' intrinsic and extrinsic motivations. These factors include age, gender, sociocultural background, and educational track (general vs vocational). According to a number of studies, including those that are based on Self-Determination Theory (Deci & Ryan, 1985), it is essential to have a comprehensive motivating approach that encourages participants to develop their independence, competence, and sense of connectivity in the context of physical education institutions. If teachers have a solid understanding of the complexities of motivational psychology, they may be better able to engage their pupils and encourage these kids to participate actively in the classroom.

This study investigates the ways in which different types of educational environments influence the degrees of intrinsic and extrinsic motivation that students exhibit. In order to develop programs that are more inclusive and student-centered, and that promote both short-term and long-term physical activity, the purpose of this research is to find the reasons why students engage in physical education classes with the intention of developing programs that are more inclusive.

## OBJECTIVES

1. To determine and contrast how students' involvement in physical education courses is impacted by intrinsic and extrinsic motivation.
2. To investigate how students from professional and normal educational routes vary in terms of motivating variables.

## MATERIAL AND METHOD

### Participants

The study included 41 CBSE-affiliated Indian senior secondary school pupils. Students ages varied from 16 to 25 with a mean of  $16.37 \pm 0.829$  years. Participants were either studying academically or in a specialist vocational program. There is an academic route for college-bound students and a vocational track for fast-track entry. The academic class consisted of 20 students



(6 men and 14 girls) with an average age of  $16.7 \pm 0.571$  years, whereas the vocational class consisted of 21 students (19 males and 2 females) with an average age of  $16.05 \pm 0.921$  years. The study's goals and parameters were explained to participants in writing and verbally. There was no pressure to participate, so anybody may opt out. All students and parents gave written consent. The university's Institutional Ethics Committee approved the study in accordance with the ICMR and Declaration of Helsinki.

### Experimental Design

This study was designed to be observational and cross-sectional, with the goal of determining the most significant factors, both internal and external to the school, that drive children to participate in physical education classes. Following a physical education class that had been scheduled, the participants were given a standardised questionnaire that had 32 questions. Of these, 16 questions dealt with inner motivation, while the other 16 questions dealt with extrinsic reward. The administration of the questionnaire was carried out in a manner that did not disrupt the children's daily routine and was coordinated with the activities that are typically carried out at school.

### Procedures

The questionnaire was created by Indian academics and five PE and SS professionals, including university and high school PE professors and instructors. The questionnaire was based on educational motivational ideals but customised to Indian school culture. Meira and others' theoretical frameworks matched literature and other studies. To assess content and clarity, 10 non-final sample students took a prototype test. Pilot study comments improved question phrasing, clarity, and contextual relevance. We asked experts to score each item's significance, clarity, and relevance on a 5-point Likert scale, with 1 being strong disagreement and 5 strong agreement. Their suggestions influenced changes. The final poll included 32 items in three categories for internal and external motivators. Before the poll, students were advised to pick one response each problem and respond based on their preferences and physical education experiences. The questionnaire's internal consistency was assessed using Cronbach's alpha, yielding a satisfactory reliability score of  $\alpha = 0.85$ . Subscale reliability of 0.71 to 0.96 supported the instrument's application for assessing motivation in Indian school PE. Internal consistency across dimensions is high.

### Statistical Analysis

Data was analysed using descriptive and inferential statistics. Frequency tables showed how often each item was agreed or disagreed with. The Likert scale was used to analyse answers. Scores below 3 indicated agreement and scores above 3 indicated disagreement. Fisher's exact test was used to compare academic vs. vocational schooling and intrinsic vs. extrinsic motivation due to the small sample size. Cramer's V was used to quantify association strength and understood as follows:

- $0 < V < 0.1$ : Very weak association
- $0.1 \leq V < 0.3$ : Weak association



- $0.3 \leq V < 0.5$ : Moderate association
- $V \geq 0.5$ : Strong association

The threshold of significance was selected at  $p < 0.01$  because of the exploratory objective of the research and the nature of the sample.

## RESULT

Table 1 shows pupils' extracurricular physical activity results. The results show 46.35 percent of pupils played organised sports. Included are students who played outside school sports. Only 10% of regular education students played federation sports, compared to 85% of professional education students. Federation sports have more participation than school sports. Only 21.29 percent of students questioned were active in extracurricular sports, 5% of the regular class and 28% of the professional class. Professional education students exercised more outside of physical education than standard education students. Practitioners are fewer than non-practitioners in both circumstances. Table 2 presents student PE experience questionnaire findings. Table 3 demonstrates that 51.22 percent of youngsters see PE as good and 39.02 percent as extremely positive. However, 4.88 percent hated PE and 4.88 percent didn't care. Professional studies students are more likely to appreciate physical education than general education students, who are 20% either agnostic or uninterested. No professional education student disliked or ignored the field.

**Table 1. Physical activities outside PE class**

| Type of Sport   | Response | Total % (n) | Regular Education |    |          | Professional Education |   |            |
|-----------------|----------|-------------|-------------------|----|----------|------------------------|---|------------|
|                 |          |             | M                 | F  | Total    | M                      | F | Total      |
| Federated Sport | Yes      | 46.35% (19) | 0                 | 2  | 10% (2)  | 16                     | 1 | 85% (17)   |
|                 | No       | 53.65% (22) | 6                 | 12 | 90% (18) | 3                      | 1 | 15% (4)    |
| School Sport    | Yes      | 21.95% (9)  | 0                 | 1  | 5% (1)   | 7                      | 1 | 38.10% (8) |
|                 | No       | 78.05% (32) | 6                 | 13 | 95% (19) | 12                     | 1 | 61.9% (13) |

**Table 2. Absolute and relative frequencies for the question Do you enjoy PE?**

| Response           | I don't like it | I like it a little | Indifferent | I like it   | I like it a lot |
|--------------------|-----------------|--------------------|-------------|-------------|-----------------|
| Regular Class      | 0% (0)          | 10% (2)            | 10% (2)     | 60% (12)    | 20% (4)         |
| Professional Class | 0% (0)          | 0% (0)             | 0% (0)      | 42.86% (9)  | 57.14% (12)     |
| Total              | 0% (0)          | 4.88% (2)          | 4.88% (2)   | 51.22% (21) | 39.02% (16)     |

## Intrinsic motivation survey

There is information on the reasons (i.e., which is the intrinsic drive) for participation in physical education classes that may be found in Table 3. The proportion of responses that were a combination of "strongly agree" and "agree" was one hundred percent in the group that received



professional education, and it was ninety-five percent in the group that received regular education. This indicates that the love of physical activity was a motivating element in the participation of both groups. Additionally, just one kid in the regular education class voiced their doubt, out of the whole group of pupils.

**Table 3. Question ‘A1. I join in physical education programs because:’ relative and absolute frequencies**

| Item                                                              | School Class     | Strongly Agree | Agree      | I am in Doubt | Disagree | Strongly Disagree |
|-------------------------------------------------------------------|------------------|----------------|------------|---------------|----------|-------------------|
| 1. I like physical activities.                                    | Regular (R)      | 25% (5)        | 70% (14)   | 5% (1)        | 0% (0)   | 0% (0)            |
|                                                                   | Professional (P) | 81% (17)       | 19% (4)    | 0% (0)        | 0% (0)   | 0% (0)            |
| 2. The classes give me pleasure.                                  | Regular (R)      | 10% (2)        | 55% (11)   | 30% (6)       | 5% (1)   | 0% (0)            |
|                                                                   | Professional (P) | 47.6% (10)     | 47.6% (10) | 0% (0)        | 0% (0)   | 4.8% (1)          |
| 3. I like to learn new skills.                                    | Regular (R)      | 15% (3)        | 65% (13)   | 15% (3)       | 0% (0)   | 5% (1)            |
|                                                                   | Professional (P) | 71.4% (15)     | 23.8% (5)  | 4.8% (1)      | 0% (0)   | 0% (0)            |
| 4. I think it is important to increase my knowledge about sports. | Regular (R)      | 75% (15)       | 10% (2)    | 15% (3)       | 0% (0)   | 0% (0)            |
|                                                                   | Professional (P) | 85.71% (18)    | 14.29% (3) | 0% (0)        | 0% (0)   | 0% (0)            |
| 5. I feel healthy with classes.                                   | Regular (R)      | 30% (6)        | 65% (13)   | 0% (0)        | 5% (1)   | 0% (0)            |
|                                                                   | Professional (P) | 66.7% (14)     | 19% (4)    | 9.5% (2)      | 4.8% (1) | 0% (0)            |

**Table 4. Fisher's precise and Cramer's V values for ‘A1. I take PE courses because:’**

| Item                                                              | Fisher's p-value | Cramer's V |
|-------------------------------------------------------------------|------------------|------------|
| 1. I like physical activities.                                    | 0.001            | 0.565      |
| 2. The classes give me pleasure.                                  | 0.003            | 0.571      |
| 3. I like to learn new skills.                                    | 0.001            | 0.575      |
| 4. I think it is important to increase my knowledge about sports. | 0.001            | 0.575      |
| 5. I feel healthy with classes.                                   | 0.006            | 0.493      |



**Table 5. Absolute and relative frequencies for ‘A2. I appreciate physical education lessons when:’**

| Item                                                              | School Class     | Strongly Agree | Agree     | I am in Doubt | Disagree | Strongly Disagree |
|-------------------------------------------------------------------|------------------|----------------|-----------|---------------|----------|-------------------|
| 1. I learn a new skill.                                           | Regular (R)      | 50% (10)       | 45% (9)   | 0% (0)        | 5% (1)   | 0% (0)            |
|                                                                   | Professional (P) | 57.1% (12)     | 28.6% (6) | 9.5% (2)      | 4.8% (1) | 0% (0)            |
| 2. I fully dedicate myself to the activity.                       | Regular (R)      | 35% (7)        | 45% (9)   | 10% (2)       | 5% (1)   | 5% (1)            |
|                                                                   | Professional (P) | 52.3% (11)     | 42.9% (9) | 4.8% (1)      | 0% (0)   | 0% (0)            |
| 3. I understand the benefits of the activities proposed in class. | Regular (R)      | 50% (10)       | 40% (8)   | 5% (1)        | 0% (0)   | 5% (1)            |
|                                                                   | Professional (P) | 57.1% (12)     | 38.1% (8) | 4.8% (1)      | 0% (0)   | 0% (0)            |
| 4. Activities give me pleasure.                                   | Regular (R)      | 30% (6)        | 55% (11)  | 10% (2)       | 0% (0)   | 5% (1)            |
|                                                                   | Professional (P) | 47.6% (10)     | 38.1% (8) | 9.5% (2)      | 0% (0)   | 4.8% (1)          |
| 5. What I learn makes me want to practice more.                   | Regular (R)      | 35% (7)        | 35% (7)   | 20% (4)       | 5% (1)   | 5% (1)            |
|                                                                   | Professional (P) | 52.4% (11)     | 38.1% (8) | 9.5% (2)      | 0% (0)   | 0% (0)            |
| 6. Move my body.                                                  | Regular (R)      | 40% (8)        | 55% (11)  | 5% (1)        | 0% (0)   | 0% (0)            |
|                                                                   | Professional (P) | 66.7% (14)     | 23.8% (5) | 9.5% (2)      | 0% (0)   | 0% (0)            |

**Table 6. A2 absolute and relative frequencies Physical education classes are great when:**

| Item                                                              | Fisher's p-value | Cramer's V |
|-------------------------------------------------------------------|------------------|------------|
| 1. I learn a new skill.                                           | 0.542            | 0.259      |
| 2. I fully dedicate myself to the activity.                       | 0.582            | 0.279      |
| 3. I understand the benefits of the activities proposed in class. | 0.933            | 0.168      |
| 4. Activities give me pleasure.                                   | 0.734            | 0.188      |
| 5. What I learn makes me want to practice more.                   | 0.448            | 0.296      |
| 6. Move my body.                                                  | 0.115            | 0.320      |



**Table 7. Relative and absolute frequencies for 'A3. I don't enjoy physical education lessons when:'.**

| Item                                                       | School Class     | Strongly Agree | Agree      | I am in Doubt | Disagree  | Strongly Disagree |
|------------------------------------------------------------|------------------|----------------|------------|---------------|-----------|-------------------|
| 1. I can't do the activities well.                         | Regular (R)      | 10% (2)        | 45% (9)    | 5% (1)        | 25% (5)   | 15% (3)           |
|                                                            | Professional (P) | 4.8% (1)       | 52.4% (11) | 19% (4)       | 19% (4)   | 4.8% (1)          |
| 2. I do not feel pleasure in the proposed activity.        | Regular (R)      | 20% (4)        | 35% (7)    | 10% (2)       | 15% (3)   | 20% (4)           |
|                                                            | Professional (P) | 19% (4)        | 33.3% (7)  | 28.6% (6)     | 14.3% (3) | 4.8% (1)          |
| 3. I almost do not have the opportunity to play.           | Regular (R)      | 15% (3)        | 35% (7)    | 10% (2)       | 20% (4)   | 20% (4)           |
|                                                            | Professional (P) | 19% (4)        | 28.6% (6)  | 23.8% (5)     | 19% (4)   | 9.5% (2)          |
| 4. I exercise my body a little.                            | Regular (R)      | 10% (2)        | 35% (7)    | 25% (5)       | 5% (1)    | 25% (5)           |
|                                                            | Professional (P) | 14.3% (3)      | 23.8% (5)  | 33.3% (7)     | 9.5% (2)  | 19% (4)           |
| 5. There is no time to practice everything you would like. | Regular (R)      | 15% (3)        | 40% (8)    | 30% (6)       | 5% (1)    | 10% (2)           |
|                                                            | Professional (P) | 23.8% (5)      | 42.9% (9)  | 9.5% (2)      | 9.5% (2)  | 14.3% (3)         |

**Table 8. A3. I don't enjoy physical education courses when: Fisher's exact Test and Cramer's V values.**

| Item                                                       | Fisher's p-value | Cramer's V |
|------------------------------------------------------------|------------------|------------|
| 1. I can't do the activities well.                         | 0.562            | 0.289      |
| 2. I do not enjoy the proposed activity.                   | 0.460            | 0.304      |
| 3. I almost do not have the opportunity to play.           | 0.763            | 0.229      |
| 4. I do little physical exercise.                          | 0.882            | 0.177      |
| 5. There is no time to practice everything you would like. | 0.632            | 0.274      |

Professional education students overwhelmingly chose "strongly agree" and "agree" to engage in PE because they enjoyed it. In comparison, 10% strongly agreed, 55% agreed, 30% undecided,



and 1% disagreed in the regular education class. The examination of students' motivation for professional education found that 95.2% "strongly agreed" or "agreed" and one student was doubtful. Conventional education had its choices: 80% of the class participated, 15% had reservations, 5% refused, and 5% 'agreed' or 'agreed' with the assertion. Most children in both groups said "strongly agree" and "agree" when asked why sports and other information is essential. Similar responses were obtained when asked whether PE made youngsters healthy. The dissident view was small, but most students in both groups participated because of the suggestions. The professional education group responds more consistently. However, the normal education group's replies were more equally spread throughout all options. Table 4 shows Fisher's exact test results. Table 8's p-values for all items were 0.01, eliminating out the idea that students' least favoured PE class subject was impacted by their schooling. Cramer's test showed 0.1–0.3 group relationships. The second component was the exception, with a value of 0.3 suggesting a strong relationship.

### Extrinsic motivation survey

Table 9 shows that 1 (4.8%) professional education student and 2 (10%) regular education students did not agree that the desire to get good grades was the strongest factor influencing their participation in physical education classes (B1). Every student also disputed that "my performance is better than that of my colleagues". Kids didn't prioritise outperforming peers yet. This topic was opposed by both professional (76.2%) and ordinary (90%) education students. Fisher's exact test verified p values  $>0.01$  in Table 10, hence there is no indication that education altered extrinsic PE class motives. When using Cramer's V test, all items got values between 0.3 and 0.5, indicating substantial category linkage. Table 11's second question (B2) shows that most kids valued PE for distinct extrinsic reasons. Regular education students (80%) valued having their opinions recognised more than professional education students (90.5%), who valued class integration. Outperforming peers was the weakest reason for students to appreciate class. Both instructional methods had results.

**Table 9. Question 'B1. I join in physical education sessions because:' relative and absolute frequencies.**

| Item                                  | School Class     | Strongly Agree | Agree     | I am in Doubt | Disagree  | Strongly Disagree |
|---------------------------------------|------------------|----------------|-----------|---------------|-----------|-------------------|
| 1. It is part of the school subjects. | Regular (R)      | 15% (3)        | 55% (11)  | 10% (2)       | 5% (1)    | 15% (3)           |
|                                       | Professional (P) | 47.6% (10)     | 38.1% (8) | 4.8% (1)      | 9.5% (2)  | 0% (0)            |
| 2. I'm with my friends.               | Regular (R)      | 25% (5)        | 65% (13)  | 5% (1)        | 0% (0)    | 5% (1)            |
|                                       | Professional (P) | 38.1% (8)      | 33.3% (7) | 14.3% (3)     | 14.3% (3) | 0% (0)            |



|                                                              |                  |            |           |           |           |          |
|--------------------------------------------------------------|------------------|------------|-----------|-----------|-----------|----------|
| 3. My parents' income is greater than that of my colleagues. | Regular (R)      | 0% (0)     | 10% (2)   | 35% (7)   | 30% (6)   | 25% (5)  |
|                                                              | Professional (P) | 9.5% (2)   | 14.3% (3) | 38.1% (8) | 33.3% (7) | 4.8% (1) |
| 4. I want to get good grades.                                | Regular (R)      | 20% (4)    | 70% (14)  | 5% (1)    | 0% (0)    | 5% (1)   |
|                                                              | Professional (P) | 61.9% (13) | 33.3% (7) | 4.8% (1)  | 0% (0)    | 0% (0)   |

**Table 10. Fisher's exact and Cramer's V values for 'B1. I take PE courses because:'.**

| Item                                                         | Fisher's p-value | Cramer's V |
|--------------------------------------------------------------|------------------|------------|
| 1. It is part of the school subjects.                        | 0.076            | 0.439      |
| 2. I'm with my friends.                                      | 0.104            | 0.427      |
| 3. My parents' income is greater than that of my colleagues. | 0.343            | 0.349      |
| 4. I want to get good grades.                                | 0.014            | 0.444      |

**Table 11. Question 'B2. I appreciate physical education lessons when:' relative and absolute frequencies**

| Item                                                          | School Class     | Strongly Agree | Agree      | I am in Doubt | Disagree  | Strongly Disagree |
|---------------------------------------------------------------|------------------|----------------|------------|---------------|-----------|-------------------|
| 1. I forget about the other classes.                          | Regular (R)      | 30% (6)        | 20% (4)    | 10% (2)       | 30% (6)   | 10% (2)           |
|                                                               | Professional (P) | 47.6% (10)     | 23.8% (5)  | 23.8% (5)     | 4.8% (1)  | 0% (0)            |
| 2. The teacher and/or my colleagues recognise my performance. | Regular (R)      | 15% (3)        | 50% (10)   | 20% (4)       | 0% (0)    | 15% (3)           |
|                                                               | Professional (P) | 38.1% (8)      | 38.1% (8)  | 9.5% (2)      | 14.3% (3) | 0% (0)            |
| 3. I feel integrated into the class.                          | Regular (R)      | 30% (6)        | 45% (9)    | 10% (2)       | 10% (2)   | 5% (1)            |
|                                                               | Professional (P) | 42.9% (9)      | 47.6% (10) | 4.8% (1)      | 4.8% (1)  | 0% (0)            |
| 4. My opinions are accepted.                                  | Regular (R)      | 20% (4)        | 60% (12)   | 5% (1)        | 0% (0)    | 15% (3)           |



|                                   |                     |           |               |              |           |          |
|-----------------------------------|---------------------|-----------|---------------|--------------|-----------|----------|
|                                   | Professional<br>(P) | 28.6% (6) | 47.6%<br>(10) | 19% (4)      | 4.8% (1)  | 0% (0)   |
| 5. I'm better than my colleagues. | Regular (R)         | 5% (1)    | 10%<br>(2)    | 10% (2)      | 30% (6)   | 45% (9)  |
|                                   | Professional<br>(P) | 4.8% (1)  | 19%<br>(4)    | 33.3%<br>(7) | 38.1% (8) | 4.8% (1) |

**Table 12. Question B2 Fisher's exact test and Cramer's V values. Physical education lessons are fun when:**

| Item                                                          | Fisher's p-value | Cramer's V |
|---------------------------------------------------------------|------------------|------------|
| 1. I forget about the other classes.                          | 0.096            | 0.440      |
| 2. The teacher and/or my colleagues recognise my performance. | 0.059            | 0.472      |
| 3. I feel integrated into the class.                          | 0.720            | 0.237      |
| 4. My opinions are accepted.                                  | 0.188            | 0.394      |
| 5. I'm better than my colleagues.                             | 0.023            | 0.497      |

**Table 13. Absolute and relative frequencies for 'B3. I don't enjoy physical education lessons when:'.**

| Item                                                                   | School Class        | Strongly Agree | Agree        | I am in Doubt | Disagree  | Strongly Disagree |
|------------------------------------------------------------------------|---------------------|----------------|--------------|---------------|-----------|-------------------|
| 1. I don't feel integrated into the class.                             | Regular (R)         | 20% (4)        | 45%<br>(9)   | 10% (2)       | 15% (3)   | 10% (2)           |
|                                                                        | Professional<br>(P) | 14.3% (3)      | 23.8%<br>(5) | 38.1%<br>(8)  | 14.3% (3) | 9.5% (2)          |
| 2. I don't sympathize with the teacher.                                | Regular (R)         | 15% (3)        | 30%<br>(6)   | 10% (2)       | 20% (4)   | 25% (5)           |
|                                                                        | Professional<br>(P) | 4.8% (1)       | 33.3%<br>(7) | 19% (4)       | 23.8% (5) | 19% (4)           |
| 3. The teacher compares my performance with that of another colleague. | Regular (R)         | 25% (5)        | 35%<br>(7)   | 10% (2)       | 10% (2)   | 20% (4)           |
|                                                                        | Professional<br>(P) | 14.3% (3)      | 28.6%<br>(6) | 28.6%<br>(6)  | 14.3% (3) | 14.3% (3)         |
| 4. My colleagues laugh at my failures.                                 | Regular (R)         | 15% (3)        | 40%<br>(8)   | 15% (3)       | 15% (3)   | 15% (3)           |



|                                                                          |                  |           |            |           |            |           |
|--------------------------------------------------------------------------|------------------|-----------|------------|-----------|------------|-----------|
|                                                                          | Professional (P) | 9.5% (2)  | 33.3% (7)  | 14.3% (3) | 28.6% (6)  | 14.3% (3) |
| 5. Some colleagues want to demonstrate that they are better than others. | Regular (R)      | 35% (7)   | 40% (8)    | 5% (1)    | 10% (2)    | 10% (2)   |
|                                                                          | Professional (P) | 14.3% (3) | 47.6% (10) | 14.3% (3) | 19% (4)    | 4.8% (1)  |
| 6. Obtaining low grades.                                                 | Regular (R)      | 15% (3)   | 40% (8)    | 15% (3)   | 20% (4)    | 10% (2)   |
|                                                                          | Professional (P) | 14.3% (3) | 9.5% (2)   | 9.5% (2)  | 52.4% (11) | 14.3% (3) |
| 7. My faults make me not look like a good student to the teacher.        | Regular (R)      | 10% (2)   | 30% (6)    | 15% (3)   | 30% (6)    | 15% (3)   |
|                                                                          | Professional (P) | 23.8% (5) | 14.3% (3)  | 28.6% (6) | 23.8% (5)  | 9.5% (2)  |

**Table 14. Question B3 Fisher's exact test and Cramer's V values. Physical education lessons are bad when:**

| Item                                                                     | Fisher's p-value | Cramer's V |
|--------------------------------------------------------------------------|------------------|------------|
| 1. I don't feel integrated into the class.                               | 0.308            | 0.344      |
| 2. I don't sympathize with the teacher.                                  | 0.849            | 0.218      |
| 3. The teacher compares my performance with that of another colleague.   | 0.634            | 0.260      |
| 4. My colleagues laugh at my failures.                                   | 0.882            | 0.174      |
| 5. Some colleagues want to demonstrate that they are better than others. | 0.489            | 0.304      |
| 6. Obtaining low grades.                                                 | 0.124            | 0.420      |
| 7. My faults make me not look like a good student to the teacher.        | 0.494            | 0.294      |

Fisher's exact test showed that all items had  $p > 0.01$  values (Table 12), suggesting education did not impact pupils' extrinsic motivations for loving PE. Except for the third item, which revealed a poor link owing to a value one point lower, the Cramer test showed a moderate correlation across groups, with values ranging from 0.3 to 0.5. Table 13's third extrinsic incentive question (B3) reveals that 65% of students hated PE when it wasn't part of their regular curriculum. However,



professional education showed that 61.9% of students detested PE since some peers tried to be better. "My failures make it not look good for the teacher" was the least important concern among normal education students, with 45% (regular) and 33.3% (professional) disagreeing. Low GPA was the least important factor for 66.7% of regular education students. The first question stressed class engagement when students wanted high results. Fisher's exact test revealed  $p > 0.01$  values (Table 14), indicating there was no indication that schooling affected extrinsic reasons children disliked PE. The Cramer test showed minor group relationships (values between 0.1 and 0.4) except for the sixth item, which had a score between 0.3 and 0.5, suggesting a significant link. This study aimed to determine the most and least important drivers of students' intrinsic and extrinsic motivation in physical education. This study also used questionnaires to analyse intrinsic and extrinsic motivation in ordinary and professional education students. The research found that intrinsic motivation was more essential in regular and professional education programs. The survey's first two questions, based on Kobal [31], asked why pupils liked PE. These questions affected students' intrinsic drive, as revealed by their frequency of responses. According to studies [35,36], various recommendations motivate people to learn, and their intrinsic and extrinsic incentives determine their learning preferences. Thus, the intrinsic impact is essential for enjoying physical exercise in any context. The data reveal that students engaged because they like physical activities.

### **Intrinsic motivation**

Table 6 demonstrates that the first two intrinsic motivation questions (A1 and A2) were almost identical for the two education methods. According to data, pupils in both types of schools prioritise classroom learning that enhances their sports and other knowledge. Table 3 shows the percentages of ordinary and professional education students who agreed with this viewpoint. The second question (A2) data analysis showed that both groups of pupils appreciated gaining new abilities in physical education programs (Table 5). Therefore, teachers should switch things up, create excitement, and come up with fresh ideas in class to engage kids in physical education. Our results support prior studies suggesting students appreciate physical activities and relate them to better physical and mental health and quality of life. Students struggle to find personal fulfilment when assigned projects that need intrinsic motivation, according to another research. Although intrinsic factors motivate both regular and professional education, the two types of responses to question A2 differ in how they value the reasons (Table 5).

Here, professional education students valued class integration more than regular education students, who valued having their opinions acknowledged. However, the residual value of responses shows that both education methods did not prioritise becoming better than their peers. On the third question (A3) in Table 7, students in both the normal and professional education groups hated PE because they didn't have enough time to complete all the activities they desired. This was true for 55.7% of regular education and 66.7% of professional education students. Instructors must keep courses interesting and break-free. This involves increasing task duration regardless of teaching style. This would make students feel good about themselves, the class, and



their participation. Both sorts of schools' kids despised PE since they weren't active enough. It's likely that students didn't appreciate the lack of motivation in PE class. The new study confirms previous studies linking intrinsic motivation to the motivational environment. Physical education tends to boost human well-being in terms of interest and enjoyment since it promotes self-improvement, personal benefit, and continuous advancement. However, studies have demonstrated that egotism may reduce intrinsic motivation and task orientation. Another research found that learning-oriented motivational climates boost intrinsic motivation and basic psychological requirements. Success criteria in learning-oriented environments are subject-centric and increase intrinsic motivation.

### **Extrinsic motivation**

The results suggest that both modes of schooling focus on achieving good grades in PE class, even if their motivation is intrinsic. Students in general and specialist programs voted for this factor 90 and 95.2%, respectively. The prior emphasis on social relations and the agreement that physical education is an essential part of the school curriculum support the idea that the two pedagogical approaches are compatible in terms of student academic performance. Thus, the social importance put on learning in school curriculum and physical education courses conflicts with students' assumption of a high grade as a measure of academic accomplishment. In contrast, professional education majors scored better on the third question, "I dislike PE classes when I receive poor grades" (B3.6). Professional students are extrinsically motivated to perform hard in PE classes to enhance their marks. Student reasons for enjoying PE lessons varied when it came to extrinsic motivation in question 2 (B2). Eighty percent of ordinary education students thought their thoughts should be heard, whereas ninety-five percent of professional education students did. These were the most essential aspects in students' PE enjoyment.

Students in both classes strongly disagreed of "I am better than my colleague". 75% of ordinary education students did not believe this item made PE more fun, 42.9 % of professional education students did not, and 33.3 % were undecided. Different sets of students valued the third question (B3) for different reasons. Normal education pupils, who dislike PE, gave "I do not feel integrated into the class" more weight. Interpersonal contacts tend to drive regular education students' interest in this profession more than alternative education students. However, professional education students underlined the importance of colleagues establishing their excellence. As with normal youngsters, social relationships are emphasised. Of the criteria considered as minor to proper education, 55% said students should be courteous to the teacher. Using non-egocentric achievement markers might make individuals feel less capable, according to studies. As a consequence, these symptoms typically reflect motivational susceptibility and negative or maladaptive behavioural responses, such as less devotion and persistence in achieving objectives, less enjoyment in the activity, and greater performance anxiety. According to study, feeling competent in physical activities improves motivation and persistence. The study may have limitations like a limited sample size or that all the kids attend the same school.

### **CONCLUSION**



This study aimed to determine which intrinsic and extrinsic motivators had the most and least influence on Indian kids' PE program involvement. According to the data, academic and vocational students succeed for internal and external reasons. However, intrinsic motivation—like loving exercise, learning new skills, and feeling successful—was the most important component in both groups. Vocational students were more internally and externally motivated than academic pupils. These kids were more engaged in physical education because they agreed more strongly with statements about the advantages of exercise, learning new things, and getting praise. However, academic stream students appreciated the need of physical exercise for their education but were more driven by social factors like making friends in class and adapting to new situations. According to extrinsic motivation, vocational students value academic success and physical education's institutional significance to the school curriculum. Academic students are more affected by social acceptance and classroom integration. Given these findings, physical education classes should be tailored to pupils' innate desire. Teachers and curriculum developers may leverage intrinsic and extrinsic motivation by adapting lessons to students' interests while reaching curricular goals. Recognising students' multiple motivational factors may help teachers create a more inclusive, engaging, and productive PE environment. The report recommends doing further research across educational paths, geographical areas, and gender identities to better understand physical education motivation. These findings might change teaching methods, encourage inclusive physical education, and enhance students' health by promoting longer times of activity.

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