

# A Qualitative Study Of The Components Pertaining To Intrinsic Motivation In Physical Education

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## ARTICLE INFO

## ABSTRACT

The purpose of this qualitative study is to fill gaps in our understanding of the variables that motivate students to exercise their own will: approach and Procedures. Students majoring in secondary physical education were chosen at random from a pool of 255 students using appropriate questionnaire scores to conduct sixteen in-depth interviews. Both individual and social-environmental variables were linked to an intrinsic desire to participate in PE, according to analyses of interview transcripts. Students' intrinsic motivation was affected by their variations in competence perception, autonomy perception, physical appearance, and goal orientation. A student's social environment encompasses not only the physical education curriculum, instructors, classmates, and school athletic facilities but also their family's physical activity habits and the encouragement they receive from loved ones, involvement in extracurricular athletic activities, exposure to media portrayals of physical activity, cultural values, and societal assumptions. A myriad of social influences impacts students' intrinsic desire to participate in PE. When planning PE classes, these factors must be considered.

**Keywords:** Cultural values, physical appearance, Goal orientation, Physical education, Intrinsic motivation.

## Introduction

There is some evidence that physical education programs help pupils grow as individuals. Participation allows for amusement, the development of motor abilities, and the chance to work with others. We may also give information on how to live a healthy lifestyle. However, research from India and the Asian Countries<sup>[1]</sup> has shown that interest and involvement in physical education (P.E.) progressively decreases with age. That is why it is important to look at what drives children to exercise in P.E. lessons.

Among the topics investigated in the field of motivational research pertaining to physical education is intrinsic motivation (IM). People who are genuinely driven do what they do because they like it and get a sense of fulfillment just from doing it.<sup>[2]</sup> Perseverance, curiosity, pleasure, and psychological well-being are traits linked to acts that are intrinsically driven.

Several research has given physical education teachers practical recommendations by shedding light on potential factors that motivate students to exercise on an intrinsic level.<sup>[3]</sup> In order to evaluate preexisting psychological ideas, the majority of these investigations have used quantitative methods. However, PE is a one-of-a-kind classroom; therefore, generalizable notions about student motivation from other fields may need to be more accurate. Moreover, it is doubtful that any research using quantitative methodology adequately reflects the intricacy of the school environment and the interplay of many elements impacting students' motivation. The purpose of this research was, therefore, to compile data on potential factors that motivate students to exercise on an intrinsic level.

There have been studies that have looked at what makes students intrinsically motivated to exercise, and those that have looked at how social-environmental variables play a role have fallen into two main categories. Research in the field of physical education has identified four characteristics of individuals that impact their intrinsic motivation. These include how beneficial the PE class is, how competent the instructor is, how autonomous the students feel, and how goal-oriented they are toward accomplishment.

According to multiple studies, students are more likely to participate enthusiastically in physical education classes when they have a positive impression of their abilities.<sup>[4-6]</sup> A person's sense of self-determination, or autonomy, is another factor that impacts their intrinsic drive. Students in PE who have a sense of agency in their work are more likely to be driven by internal factors rather than external rewards.<sup>[7]</sup>

Their achievement goal orientation greatly influences a student's sense of competence and success. People may be working for distinct ends when they participate in accomplishment activities, according to goal perspectives theory.<sup>[8]</sup> While some students are more concerned with proving their superiority (ego orientation), others are more concerned with developing their skills and doing the assignment well (task orientation). Task orientation promotes intrinsic motivation, while ego orientation decreases it.<sup>[9]</sup>

There is a correlation between students' intrinsic motivation and their expectations for physical education. Both the outcome likelihood (the chance that an action will result in a certain outcome) and the outcome value (the value that an individual assigns to the potential outcomes of an action) interact to create outcome expectancies.<sup>[10]</sup> According to research by Goudas, Dermizaki, and Bagiatis (2000),<sup>[11]</sup> students are more likely to show increased intrinsic motivation when they believe their physical education class is leading to meaningful and practical objectives.

Evidence suggests that the motivating atmosphere, instructional style, lesson content, and adult support are the social-environmental elements that impact students' intrinsic motivation in physical education classes. Students are more likely to exhibit high levels of intrinsic motivation when the motivational climate in a physical education class is mastery-oriented (i.e., when the focus is on helping students improve themselves and when they receive praise when they work hard).<sup>[12-15]</sup> Similarly, students' intrinsic motivation is enhanced by a teaching method that allows them to make choices. Students' responses to the athletic activity were favorably affected by a differentiated teaching method (in which they were given many alternatives) regardless of their feelings of autonomy or competence.<sup>[16]</sup>

Different activities elicit different types of intrinsic motivation. Students' perceived ability and their degree of self-determination for the given activity are partially responsible for the variation in their degrees of intrinsic motivation across activities. But the exercise's special features are what pique the children's attention.

According to Biddle (1995),<sup>[17]</sup> the majority of research on intrinsic motivation has used quantitative methods. Such studies detail theory-driven, quantitative, well-controlled investigations of the elements influencing pupils' intrinsic motivation (self-determination, competency, etc.). The motivation of physical education students has been the subject of a number of qualitative investigations in recent years.

A growing body of research has taken a qualitative approach to studying physical education classrooms from the student's point of view. The research conducted by Xiang et.al. (1998)<sup>[18]</sup> and Scrabis et.al (2017)<sup>[19]</sup> found that students' perceptions of their competency varied with age and had a role in determining how hard they worked in physical education courses. Students, irrespective of their actual or perceived level of ability or performance achievements, reported more satisfaction when the class focused on personal development. Not only that, but Carlson (1995),<sup>[20]</sup> Dyson (1995),<sup>[21]</sup> Hopple and Graham (1995),<sup>[22]</sup> and Nugent and Faucette (1995)<sup>[23]</sup> all found that student engagement in physical education courses increased when they were given greater agency and had a say in class decisions.

Our understanding of ideas connected to intrinsic motivation in PE may be lacking as most research in this field has used a quantitative approach. There may be a number of other factors linked to students' intrinsic motivation, given the complexity of the educational environment. According to new theories, "sport and exercise participants are not simply intrinsically or extrinsically motivated or even motivated, but all of the above, depending on the task at hand".<sup>[24]</sup> Students' motivation is associated with a multitude of elements in the one-of-a-kind context of physical education.

Thus, rather than looking at the impact of pre-determined variables, the goal of this research was to use a qualitative technique to map most of the potentially important components. The mechanics of student motivation in school PE might be better understood with this data, and it could even point the way toward ways to tweak PE programs to get the most out of children.

### **Method:**

Students previously selected via surveys as embodying all forms of intrinsic drive were interviewed in detail for this research. There were two stages to the research. Throughout Phase A, a vast number of students were asked to fill out questionnaires on their intrinsic drive. Out of this pool, sixteen participants were selected to represent the whole spectrum of results. These pupils had interviews in the second stage.

#### ***The setting, participants, and data collection***

S.V. University Campus School, Tirupati, and S.V. High School (T.T.D.) Tirupati, the two high schools in the same town of Tirupati, Andhra Pradesh, were the sites of the research. Two times a week, students participated in physical education lessons. Basketball, volleyball, football, and track and field are among the most often taught sports in this activity-based curriculum that adheres to the national curriculum. The school administrators granted the study's authorization.

### **First Stage-A**

A total of 255 students from 2 schools i.e. S.V. University Campus School, Tirupati, and S.V. High School (T.T.D.) Tirupati, (144 boys and 111 girls) filled out the surveys. They were twelve to fifteen years old. We used two self-report surveys.

### **Measurement tool for intrinsic motivation**

Ryan (1982) administered the Intrinsic Motivation Inventory (IMI). Each of the four subscales that make up the IMI assesses a different aspect of physical education: enjoyment/interest (four items, for example, "what we do in physical education is very interesting"); effort/importance (four items, for example, "I put a lot of effort into physical education class"); competence; and pressure/tension (four items, for example, "Sometimes I worry about making mistakes in physical education"). One measure of the intrinsic drive is a composite score. Nonetheless, there were two justifications for leaving the Competence sub-scale out of this research. Two reasons: first, it is considered an antecedent, not an end, of intrinsic motivation,<sup>[25]</sup> and second, it coincides with the perceived competence measure that we used. On a 5-point scale, students ranked their responses from 1 (strongly disagree) to 5 (strongly agree).

### **Perceived competencies**

One item asked student to rate their physical education competence relative to their classmates, while the other asked them to rate their ability relative to their classmates; these statements were taken from Gutmann, A. (1990)<sup>[26]</sup> and were used to gauge students' perceived competence. On a 5-point scale, where 1 represents a severe disagreement, and 5 represents a strong agreement, students scored their responses.

### **Second Stage-B**

As part of this stage, sixteen interviews were carried out. Maximum variation sampling was the method of choice for this intentional sample. In other words, we made an effort to choose students who would reflect our target demographic across all of our relevant aspects.<sup>[27]</sup> The parameters were the students' ratings on perceived competence and intrinsic motivation; the sample included students of both sexes and all ages. Eight boys and eight girls from grades 7, 8, and 9 were chosen for the interviews, along with all possible score variants. Pilot interviews were carried out with students who were not included in the research before the main interviews to help refine the questions and improve the interviewer's technique. Each interview began with students completing a permission form.

The questions were asked in a semi-structured fashion, which allowed for more in-depth exploration. A key theoretical framework for in-depth interviews is phenomenology, which is defined as "the study of people's lived experiences and worldviews." Every interview was carried out by the study's primary investigator. During scheduled school PE classes, participants sat in quiet rooms for 35–45-minute interviews. The interviews were all taped and then transcribed word for word. Students were asked to rate their level of interest, pleasure, effort, perceived autonomy, perceived competence, and pressure as markers of intrinsic motivation. Questions like "Do you like PE?" and "How important is it that you learn something in PE?" are examples of such inquiries. Additional questions and probes were asked after each response.

### **Data Analysis**

Thematic analysis<sup>[29]</sup> outlined a three-stage process for data analysis. As a first step, we categorized and discovered raw data themes from the interview transcripts. Using a deductive approach, this stage included drawing on existing theory and previous research to inform the production and classification of codes. Step two included generating and sorting new codes from data that didn't match the existing ones. Step three included checking the codes' and coding's dependability. As a second "coder" who was not a peer debriefer and had experience with qualitative research reviewed the codes and coding, we were able to achieve reliability. Changes were implemented after researchers and programmers reached a consensus. The Nud\*ist program was used to coordinate the data management for the interview.<sup>[30]</sup>

Two peer debriefers, the second and third authors, helped with ongoing analyses<sup>[31]</sup> and took notes on the raw data throughout the investigation. Two additional researchers with expertise in qualitative methods met for peer debriefing sessions to discuss and analyze the research's methodology, as well as the coders' interpretations of the data.

Lincoln and Guba (1985)<sup>[32]</sup> used a number of ways to achieve trustworthiness. Prior to, during, and after each interview, members were checked. Once the interviewer had asked a series of comparable questions, the students were to confirm the interviewer's understanding of the responses and their meaning. Two to five days after the interview, each student was requested to read the transcription in order to confirm their interview. A reflective notebook was also maintained. Lincoln and Guba (1985) noted that the records included daily plans, choices and explanations about methodology, personal ideas, and notes of unofficial interactions with instructors and students that were important to the research. Last but not least, we attempted to increase the study's credibility by using triangulation of sources, a kind of comparison analysis. The interviews, surveys, and reflective notebook served as the three legs of the triangulation process.

### Results

Two overarching themes emerged from the data analysis: personal characteristics and societal context. Both of them are shown in Figures 1 and 2.

#### Personal variations

Students' intrinsic desire to engage in P.E. classes varied according to their perceptions of their competence, autonomy, goal orientation, the lesson's usefulness, and physical attractiveness.

#### Perceived competencies

Competence was associated by the majority of students with ideas connected to intrinsic motivation, including interest, attention, effort, and willingness. He is not excellent, since despite his strong performance on the field, his behavior is unacceptable, and he has no idea how to work with people or even have a conversation. On the other hand, he is good because he pays close attention in class.

#### Self-determination/perceived autonomy

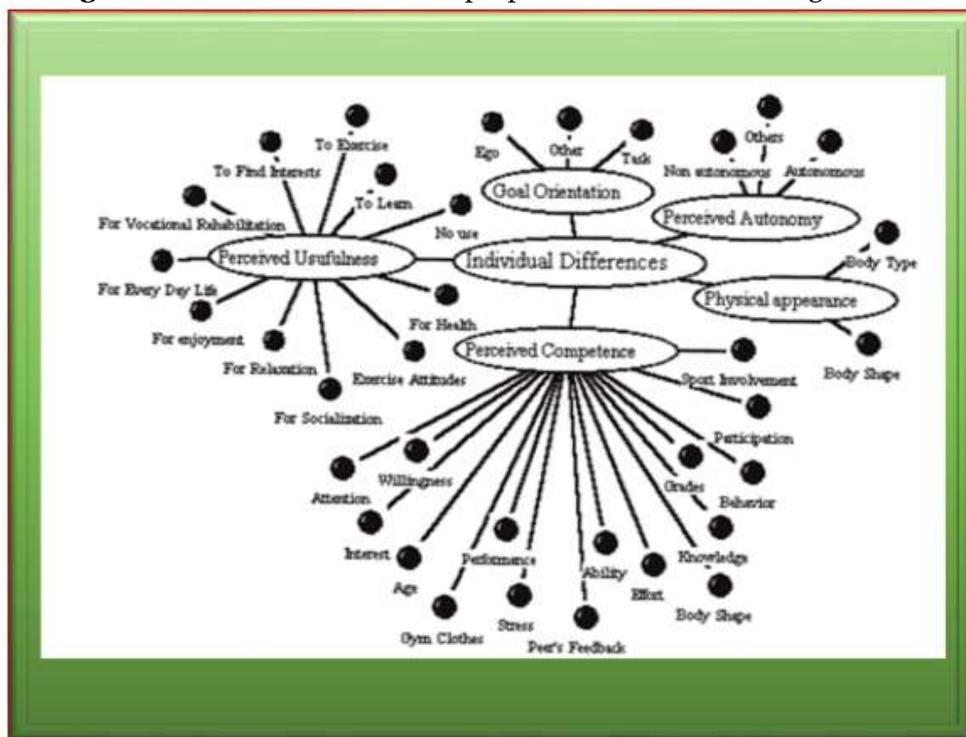
"We do everything we want, nobody forces us," and "I participate in P.E. lessons because I want to, not because I have to..." were common responses from kids who scored high on the IMI when asked about their sense of autonomy. A student who scored poorly on the activity said, "My teacher forces me to play volleyball, but I do not want to; I find it boring," indicating that they felt compelled to participate.

#### The expected outcome and the perceived utility

Students with high IMI scores cited a wide range of worthwhile reasons for class involvement. Among the many reasons given by these students, the following stood out: health benefits ("It keeps your mind and body healthy"), enjoyment, stress relief ("running or playing games cleans my mind from problems"), socialization ("It is this feeling being with others"), education, future career advancement ("to find a job when I grow up, I want to be a P.E. teacher"), physical fitness, the discovery of hidden talents, practicality, fostering a positive attitude towards physical activity, and fostering a lifelong passion for fitness.

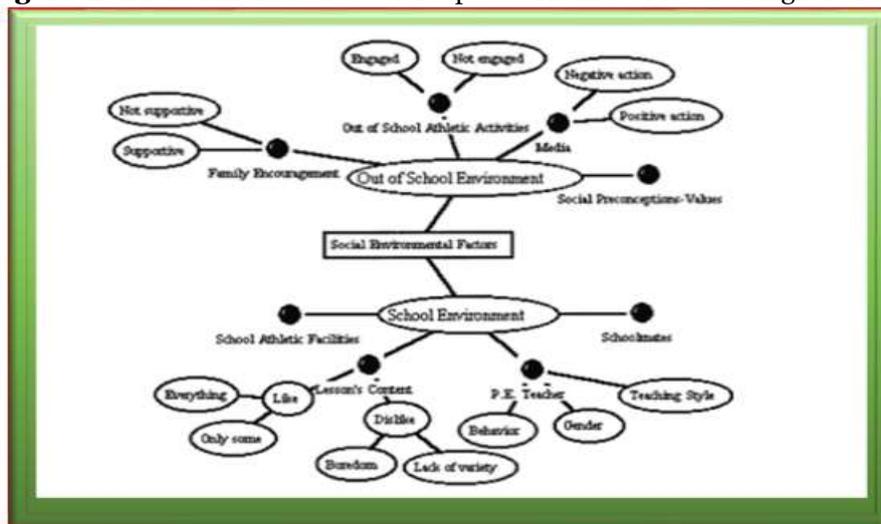
"There is no use at all; if I want to exercise, I can go somewhere outside of school and do it" is a common sentiment among students with lower IMI scores when asked about the classes' significance. As an alternative, they might state something like, "It is good for someone to exercise because he can improve his fitness or his health," instead of providing specific reasons. What this implies is that they were aware of the benefits of exercise, but it didn't matter to them.

**Figure.1:** Dissimilarities between people: Themes of lower & higher order



**Source:** Adopted from Scrabis-Fletcher, K., & Silverman, S. (2017).

**Figure.2:** Environmental and social aspects: Themes of lower & higher order.



**Source:** Adopted from Scrabis-Fletcher, K., & Silverman, S. (2017).

**Focus on the goal**

While some students expressed a desire to improve upon their current situation, others expressed a belief that they could surpass others if they fully committed themselves. However, some kids do not view physical education as a subject area in which they may excel. All they care about is taking part. Thus, they say things like, "I play regardless of whether I win or lose..." Being excellent isn't my top concern; what matters most to me is having fun while playing.

**Physical appearance**

"He is not good in P.E. because he is fat" and "He is not the athletic type" are examples of students' self-perceptions that seem to generate expectations for their physical education success. Given that the main focus of instruction was developing students' athletic abilities, it was believed that having an athletic physique would greatly enhance their chances of successfully participating.

**Impacts of society and the environment**

There was a correlation between internal drive and environmental factors as well. Both inside and outside of the classroom are considered social environmental influences. Class material, the P.E. instructor, classmates, and the school's sporting facilities were all aspects of the school's atmosphere that played a role. Family and peer support for physical exercise, extracurricular sports involvement, exposure to media portrayals of physical activity, cultural norms and assumptions, and social assumptions all fall under the category of "out-of-school environmental factors" (see Fig. 2)

**Considerations related to the school's physical surroundings**

Material covered in class Some students who do poorly on the IMI quiz say things like, "If there were dance, modern or traditional, I would participate in P.E. lessons..." when asked why they don't participate in class. Playing the same sports over and over again becomes old... "I like it when we play volleyball" is an example of how students who scored better on the IMI report attribute their active engagement to the course material. Lastly, a few children expressed their enjoyment of all aspects of physical education, regardless of the sport they participate in.

**Physical education teacher**

When it comes to student motivation, the physical education instructor is key. Depending on how they act as a teacher, students may be motivated in several ways: As a result of his unpopular teaching style, tone, and gaze, among other things, students disliked him and the class as a whole. Basketball would be a great opportunity for me to hang out with my friends, despite my dislike of the sport, but his conduct discouraged me from playing until he smiled and was friendlier.

Even when discussing the same physical education instructor, students with high and low IMI ratings from the same class had opposing views.

"I trust my physical education teacher to empathize with me and provide clarification and additional examples if I need them," the girl said. "Maybe if our teacher showed more interest and helped us to correct our mistakes or teach something new... he is very cooperative," (said cynically), said the boy. "Things were much better for us (girls) when we had a female P.E. teacher, but the last two years we've had this P.E. teacher (male)... he has a strange style..." was a comment made by a girl, suggesting that the instructor's gender was another factor impacting her perspective.

That pupils with lower levels of intrinsic drive saw their instructor differently from their peers with higher levels of intrinsic motivation is an intriguing finding. This discovery might be explained in two ways. Either the instructor changed his conduct while interacting with various students, or the student's perceptions of his behavior were different. As for the second theory, the instructor set varied standards for pupils of varying abilities, leading to the Pygmalion effect.<sup>[33]</sup> It is worth additional investigation, nevertheless, since the study's methodology precludes drawing any inferences about this discovery.

### ***Companions from school***

Students' motivation was linked to the desire for engagement with their classmates in several ways. For instance, "I like basketball because most of my friends play basketball... they influence me," or "I play basketball sometimes, mainly because the closest friends make the team, and it is only this that matters to me, not the lesson, just to have fun with my friends." These examples illustrate how people learn about their interests through interaction. One kid said it this way: "I do not like it when my friends do not include me in their games because I do not play well." This highlights the importance of pupils feeling welcomed by their classmates.

### ***The sporting facilities of schools***

In Tirupati city, the majority of public schools need more space for sports fields and playgrounds. Students often voiced their dissatisfaction with the school's sporting facilities, saying things such as, "...if we had a gymnasium, it would be better because when it rains, we stay in class..." The playgrounds are too tiny for us to play on. Thus, we need additional sports facilities.

### ***Environmental variables outside of the classroom***

Encouragement and participation in physical exercise by family members When asked about their parents' level of physical activity, students whose parents were active reported higher levels of motivation and participation in extracurricular sports. In contrast, those whose parents were unsupportive of physical education often said they were not active themselves. "Maybe it's the way my parents nurtured me, but I am not used to playing outside. I rarely go out, and all my friends are only here, in school," was the boy's remark. Still, kids' parents weren't the only ones who had an impact.

### ***Being a part of extracurricular sports***

There is a strong correlation between students' motivation and their involvement in extracurricular organized sports. "I used to play basketball many years before in teams," one student said, elaborating on how their interests outside of school connect to the material covered in class. Second, like the following: "She is better than me because she has played volleyball for many years in an organized sports team." This suggests that pupils who do not participate in extracurricular athletic activities have the belief that their peers who do have a comparative advantage in physical education classes. However, not all students who played in team sports had a strong desire to do well. For some of them, excelling in physical education classes was an opportunity to show off their skills, so they made the most of it. Some students opt out of physical education because they find it dull and uninteresting: "It is just that we have a good time, not that there is something to learn..." "Nothing I've ever learned in class has ever come from anything I've done outside of class.

### ***The media***

There was a correlation between students' perspectives on engagement and the media's role. Some kids may say, "I wish I could be like those athletes on TV," in reference to the media's portrayal of athletics. "I do not like sports, not at all, because of hooligans, the violence we see on TV..." a viewer said, highlighting the detrimental effects of aggressive behavior promotion. The media is relevant to the student's views on the physical education class. It draws people in with its model athletes but turns them off with its violent news coverage.

### ***Social assumptions and cultural norms***

The way some students felt about physical education was colored by their preconceptions. "If I play basketball, I will be taller" was one of these baseless claims. Not to mention the stereotypes surrounding "girly" and "boy" games. I stopped playing football because my pals told me it was "not for girls anymore" now that we're all grown up.

## **Discussion**

In order to better understand what motivates students to engage in physical education classes actively, this research set out to survey them on the topic. The findings revealed a myriad of elements linked to intrinsic drive, including those pertaining to social contextual influences and individual variations. Recent theories about intrinsic motivation are consistent with these findings. Both intrinsic and extrinsic incentives exist in people to varying degrees, according to Hennessey et.al. (2015);<sup>[34]</sup> thus, it's not fair to label them as either. Extrinsic motivation can be either externally regulated, internally regulated, identified, or

integrated. In contrast, three forms of intrinsic motivation—the desire to know, the desire to experience stimulation, and the desire to accomplish—can be attributed to Vallerand (1997).<sup>[35]</sup> There was a wide range of responses from the kids surveyed on their involvement (or lack thereof) in PE classes. These explanations illustrate all of the forms above of motivation and provide credence to the idea that both intrinsic and extrinsic motivation are complex concepts.

Additionally, Vallerand's (1997)<sup>[36]</sup> concept of motivation is consistent with the current findings. Many societal elements, according to this paradigm, impact the various motivational kinds. Several social elements linked to intrinsic motivation were identified in this research. These included the physical education instructor, classmates, family support, the news, and cultural norms. Other social elements impact intrinsic motivation, according to prior research in athletic and PE contexts. According to Ntoumanis (2001),<sup>[37]</sup> students' motivational types in PE were influenced by factors such as cooperative learning, focus on progress, and perceived choice. Consistent with these findings, the current investigation expands the list of social variables linked to intrinsic drive. In addition, these findings lend credence to the argument put forth recently by Vallerand and Rousseau (2001)<sup>[38]</sup> that exercise participants' (or PE students') motivation in any given situation is shaped by their position within a larger social matrix.

According to Vallerand's<sup>[39]</sup> paradigm, social variables impact many forms of motivation by meeting the psychological demands for relatedness, autonomy, and competence. The current study's findings support this viewpoint. Students connected their sense of competence and autonomy with social elements such as the physical education instructor and the lesson's topic in many instances. Another factor that students cited as influencing their involvement in extracurricular sports was the urge to form friendships with their peers.

The results of this study could change the way physical education is taught. Students' requirements for autonomy, competence, and social relatedness may be met by lesson planning that takes these factors into account. So, it's important to let kids choose how they want to participate, provide them chances to shine, and let them connect with their classmates often. In addition, it is important to address these elements in the lesson plan since students' motivation for physical education is influenced by things outside of school, such as family participation in physical exercise and media coverage of sports. Some kids may change their unfavorable views regarding PE by discussing how the media covers sports. Teachers of physical education should bear in mind that their pupils may enter the class with biases and misconceptions about PE, sports, and overall physical fitness.

### Limitations of the Study

The findings are relevant to pupils enrolled at two Tirupati town high schools since this research reflects their perspectives. The purpose of this research was not to generalize the results to all physical education classrooms in Tirupati or anywhere else. The reader is allowed to make generalizations since we are aware of the fact that some of the mentioned features would be highly contextualized to particular children and schools. Also, we can't draw any conclusions about cause and effect from the new data that influences the intrinsic desire for PE in this research.

There has to be fresh, purposeful research on how to make PE classes better. Physical education researchers would do well to be receptive to new ideas and methods that might advance our discipline.<sup>[40]</sup> We may learn more and get more out of our studies when we utilize several tools to examine both new and old material and ideas. Researchers may get a better understanding of the complex environmental aspects by using alternate research approaches.

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