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# The Impact of Effective Motivation Strategies on Student Engagement in Secondary Physical Education Classrooms

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ROGER WILLIAMS UNIVERSITY

SCHOOL OF EDUCATION

THE IMPACT OF EFFECTIVE MOTIVATION STRATEGIES ON STUDENT  
ENGAGEMENT IN SECONDARY PHYSICAL EDUCATION CLASSROOMS

DEVIN WORTMAN  
SPRING 2023

A thesis  
submitted in partial fulfillment  
of the requirements  
for a baccalaureate degree

Reviewed and approved by the following:

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Thesis Supervisor

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## **Abstract**

Properly motivating students is not only the backbone of academic success but positive in-class experiences. When students are having more positive classroom experiences, they will ultimately be more motivated to engage and succeed. More and more students today are choosing not to take physical education in school. A lack of self-confidence and a general interest in the subject are two of the many factors associated with this problem. With the help of intrinsic motivation and self-determination theory, this thesis will seek to answer the question: What impact does effective motivation have on secondary students' willingness to participate in physical education and leisure time physical activity? Results show that utilizing intrinsic motivation strategies within physical education class settings creates a positive outlook on physical education among students. In addition, results helped determine that allowing students opportunities to become self-determined will ultimately make them intrinsically motivated and want to participate in physical education and outside-of-school physical activity.

**Key Terminology:** *Intrinsic motivation, self-determination, physical education, secondary education, athletics, self-determination theory*

## Chapter 1: Introduction

Everybody wants to live a healthy life, and the first step to doing so is getting active. Most kids are generally active a fair amount as they grow up. By playing sports, or even just running around with friends, kids find ways of being active. Another thing kids do constantly is go to school, but usually they aren't as excited about that. Many young students would rather be playing sports with their friends than be stuck inside sitting at a desk and listening to a teacher speak. With all this being said, one would think the physical education aspect of school is the thing most students look forward to the most. Physical education is a chance to get up and have some fun with friends.

Unfortunately, this is not the case for many students all over the world. More and more high school students are choosing to not take physical education as an elective (Alderman 2006). On top of this, a recent study has shown that 36% of students in high school do not meet the presented guidelines in physical education (Cox et al. 2008). High school students have already been through so much schooling that it's harder for them to adapt to a potential change; changes to allow for more motivation. With elementary school students, they rely on the teacher and do not fully think for themselves yet. Middle schoolers on the other hand are a different story. This is the age that young students start to think for themselves, problem solve, and learn skills they will remember and use for the rest of their school lives and regular lives.

Student motivation within physical education all comes down to two main ideas: intrinsic and extrinsic motivation. Intrinsic motivation is when one is doing an activity for pure enjoyment. There are no consequences or rewards in mind - just for pure fun and enjoyment. Extrinsic motivation, on the other hand, is the complete opposite. It is partaking in various activities for the sake of avoiding a consequence or gaining a reward. If more and more students

around the world gain more intrinsic motivation rather than extrinsic, then motivation within these physical education classes will skyrocket.

### **Statement of the Problem**

It's no secret that it will be difficult for students to thrive without proper motivation. As mentioned earlier, more and more students are refusing to take physical education during their time in school (Alderman 2006). Ultimately, more positive experiences and feelings toward physical education would change that. There are many motivational strategies out there for students, but not enough emphasis has been put on intrinsic motivation. When students are partaking in lessons or activities for pure enjoyment, rather than for a grade, teachers will ultimately see a better attitude and more motivation to succeed in the physical education class. In addition, intrinsic motivation in school physical education will ultimately translate to students' outside-of-school physical activity. As teachers see students start to partake in leisure time physical activity, society will ultimately see more and more young people living healthy lifestyles. The whole point of physical education is to get students moving and working together while simultaneously having a fun experience. On top of this, physical education hopes to encourage students to live an active and healthy lifestyle. Although, a wide variety of students may not understand the purpose or benefits of living a healthy and active life. With that being said, the risk of childhood obesity and the facts surrounding it are absent from the literature relating to this topic. This paper will include research on childhood obesity and its effects on one's academic and social future. As more and more students drift away from physical education, it's the educator's job to get them back on track.

This analysis will go into depth on the true effects that intrinsic and extrinsic motivation have on young school students' willingness to participate in physical education and leisure time

physical activity. All students need a sense of enjoyment and fun in their physical education classes. The concept of prizes and consequences should be nowhere in the minds of young students. With an extrinsically motivated mindset, the risk of unhealthy lifestyles and mental health issues skyrocket (Cox et al. 2008). Physical education is a very different class when being compared to the other classes these students take. It involves physical activity; something that can give students a lot of difficulty. Some do not feel they are competent in the activities; some don't feel as they are in shape. This along with many other factors could cause students to develop various mental health issues. The mental health issues tend to come from a lack of social connectedness, something students deal with every single day at school.

Physical education is where healthy lifestyles are promoted and encouraged. When some don't necessarily achieve that, their physical education is ultimately to blame. When one eats unhealthy, they are much more likely to experience mental health issues throughout their lives, due to the possible weight gain. On top of this, one is being put at risk for a variety of other health issues relating to unhealthy lifestyles. A healthy lifestyle is one's foundation, and physical education is, in a way, the backbone (Haerens and Tallir 2012). These issues relating to unhealthy lifestyles and mental health issues can all be avoided through intrinsically motivating students at a young age.

When students are intrinsically motivated rather than extrinsically motivated, students are not just more likely to succeed within their physical education classes and live a healthy lifestyle moving forward, but they have the drive to grow and participate on their own. The proper motivation at a early age has the power to alter the future generations for the better. With the help of a variety of different studies, This paper will analyze a number of strategies that have been tested in schools on how intrinsic motivation affects overall desire to partake in physical

education and outside-of-school physical activities. General teaching techniques will be compared to teaching styles that have intrinsic motivation in mind to see the effects on students in practice.

### **Significance of the Research**

Teachers, parents, students, administrators, and all professionals who work with adolescents should care about this research. This research will benefit all educators for the greater good of future generations of students. When more and more educators are made aware of the effects of intrinsic motivation, society see more and more students succeed. Simple word-of-mouth communication can truly spread the word about intrinsic motivation from not only classroom to classroom but district to district. If a school administrator sees a successful group of students who were intrinsically motivated and or self-determined, they will encourage all teachers to adopt those methods in their classrooms. Research shows the benefits that intrinsic motivation has on student achievement. The presence of intrinsic and extrinsic motivation, along with the proper teaching environment and teaching style will benefit overall motivation within physical education classes immensely (Hassandra et al. 2001).

Physical education can be looked at a whole different way if students are showing vast amounts of not only engagement but a willingness to self-improve. Seeing a vast amount of students want to self-improve on their own rather than be instructed to do so by their teacher can positively change a student's education forever. Considering that intrinsic motivation is not something seen every day in schools, it is crucial to inform teachers about the best ways to incorporate this kind of motivation into their teaching. Teachers are not going to know the best strategies right away. Informing a small group of teachers opens the door for teachers to spread



the word, especially if those methods are proven to be successful in student participation and achievement.

### **Research Problem and Research Question**

The ability of a student to become self-determined through intrinsic motivation is a concept not talked about enough in schools today. Too many students are seen not wanting to participate in physical education, let alone take the class at all. Intrinsic motivation can benefit students not only in school but in everyday life as well. This research will allow teachers to better understand their individual students, while also gaining skills to better motivate them. Students will ultimately be encouraged to succeed through their own willingness to self-improve, grow, and change. With all that in mind, it is crucial to analyze intrinsic motivation in action, and if it truly does have a beneficial effect on students both inside and outside of the classroom. This paper addresses the following question:

- What impact does effective motivation have on secondary students' willingness to participate in physical education and leisure time physical activity?

### **Keywords:**

*Intrinsic motivation:* performing an activity for pure satisfaction, rather than for rewards or consequences

*Extrinsic motivation:* performing an activity for the sake of gaining approval or rewards

*Extrinsic rewards:* given to an individual for performing a task

*Self-determination theory*: Suggests that people have three psychological needs that need to be met in order to foster self-motivation and growth. Those needs are autonomy, competence, and relatedness

*Leisure time physical activity*: Engaging in physical activity on one's own free time

*Self-determined motivation*: People setting their own goals, self-advocating, and working to achieve those goals

*Autonomy*: The feeling that one has choices and is endorsing their own behavior. The sense of taking direct action plays a big role in self-determination

*Competence*: The need for one to learn different skills and gain mastery of tasks. One who feels as if they have the skills in order to succeed fosters the want to achieve set goals

*Relatedness*: One's need to feel a sense of belonging and connection to others

*Interpersonal teaching*: Learning through the use of communication and teamwork

*Amotivation*: A lack of motivation and goal-achieving behaviors

*Need-supportive teaching*: Using instructional behaviors to meet students' autonomy, competence, and relatedness needs. Supporting these needs influences engagement in learning

## **Theoretical Framework**

Self-determination theory suggests that people have three basic psychological needs that need to be met to foster growth and development: competence, autonomy, and connectedness/relatedness. In terms of competence, a student needs to feel confident in their abilities to complete a given task. If an individual feels that they can do something, they are more likely to become self-determined and take the steps necessary to achieve that goal. While

autonomy revolves around the teacher's ability to provide their students with choices when it comes to learning. Self-determination is much more likely when individuals are able to make their own decisions for their personal growth. Lastly, relatedness: everyone is in need of a sense of belonging and relation. A student will ultimately feel more self-determined if they have an attachment to others.

The things that motivate individuals the most are rewards and prizes or avoiding consequences; however, self-determination theory focuses on gaining knowledge as the primary form of motivation. The theory was developed by psychologists Edward Deci and Richard Ryan in 1985 and first presented in their book, *Intrinsic Motivation and Self-Determination in Human Behavior*. There have been a number of different researchers who have built upon the self-determination theory. Since the theory was first introduced in 1985, there have been many books and articles furthering the research done on self-determination theory. Nikos Ntoumanis, a researcher specializing in motivation, behavioral science, and exercise psychology, is just one of the many researchers who have conducted additional research into the theory. Ntoumanis has written multiple articles covering different branches of self-determination theory, including *Motivation in physical education classes: A self-determination theory perspective*; *Theory and Research in Education (2009)*; *A self-determination approach to the understanding of motivation in physical education*; and *The British Journal of Educational Psychology (2001)*. In addition, the original co-founders of the theory came together to inform the new generations of teachers and students about self-determination theory through a 2017 book, *Self-determination theory: Basic Psychological Needs in Motivation, Development, and Wellness*.

The education field relies on this theory greatly, as students need to be intrinsically motivated to ultimately become self-determined. Intrinsic motivation is the backbone of being

self-determined. When a student is intrinsically motivated, they will complete a task for pure satisfaction and growth, rather than for rewards or consequences. If a student is not intrinsically motivated, it will be very hard for them to become self-determined. Thanks to self-determination theory, students are now being taught and motivated on how to grow, change, and expand their knowledge. Self-determination theory also has been able to find various flaws within testing-based school systems, the systems that result in a poor quality of learning. Self-determination has also been proven to help students with disabilities greatly, showing they are more likely to live independently if self-determined.

Physical education specifically is greatly affected by self-determination theory. Oftentimes we see students try to avoid full participation in physical education. This could be due to a number of reasons, including students feeling as if they are not skilled at the activity, or even students not wanting to exercise in the first place. It is up to the teacher to make sure the student's three basic psychological needs are met. These needs are proven to create a more positive attitude toward physical education, and education in general (Murcia et al. 2009). On top of this, the three basic needs of self-determination theory are predictors of behavioral outcomes in physical education (Ntoumanis 2009). Self-determined students are ultimately less likely to act out or distract others in the class, as they are focused on refining their skills and gaining knowledge altogether.

Mannien and Yli-Piipari (2009) conducted research and proposed many strategies for keeping students motivated through self-determination theory. These strategies include but are not limited to, encouraging students to ask questions, demonstrating interest in each student, providing choices, and acknowledging different perspectives and feelings. Students will not

thrive without the proper motivation. With that motivation comes self-determination, forever benefiting students' academic success.

Self-determination theory relates directly to my research question: What impact does effective motivation have on middle school students' willingness to participate in physical education and leisure time physical activity? As mentioned earlier, students who are intrinsically motivated will ultimately become self-determined. Self-determination in physical education sees students participating on their own, helping each other improve, while still having fun in the process. Physical education is supposed to be one of the few times of day students have to take a step back from schoolwork and have some fun. With that, it is surprising how often students try to avoid physical education altogether. Self-determination theory stops this in its tracks, as it is proven to change attitudes and perspectives toward physical education as a whole.

This theory aligns directly with my beliefs and values on teaching. I've always believed that every student has the power to succeed if they are being taught the right way. I became fascinated by the idea of self-determined learning when I came across this theory. The idea of students wanting to grow and develop on their own was very appealing. All teachers should value each student's three basic psychological needs when they are teaching. Autonomy, competence, and relatedness can be easily worked into every teaching style, forever benefitting the future academic endeavors of students.

### **Positionality Statement**

My positionality has been shaped by a variety of social identities, one of which is my educational background. When thinking about how I want to motivate my students, I reflect on my days in middle school physical education. As a young student, I never hesitated to give my best effort to participate and compete in physical education. This will ultimately not be the case

for all students, as teachers commonly see students try to sit on the side or do a different activity altogether. However, I have vivid memories of this not being the case for my physical education classes. I constantly saw our whole class not only participate in the lesson but be engaged and give their best effort to improve. In the end, we have our teachers to thank for that. It's always common for students to dislike some of their teachers and that could be for a number of reasons, but every one of my middle school physical education teachers was someone I not only liked but felt comfortable with. The environment and overall class climate my physical education teachers promoted kept my fellow students and I motivated to participate, improve, and most importantly, help each other when needed. There are so many factors that make teaching effective, and I was lucky enough to be in an education system in which the physical education teachers used proper communication, set up effective lesson plans, and overall kept us motivated as much as possible.

Another factor that has contributed greatly to my positionality is my internship experience. I had the opportunity to complete two internships while at Roger Williams University. My first internship was a physical education mentorship at the high school level. My responsibilities included: shadowing multiple physical education teachers during classes, observing various teaching techniques, as well as assisting with the execution of lessons. I'm very grateful for this experience as it gave me my first look into physical education classes in action. Shadowing multiple teachers allowed me to see a variety of teaching strategies used, giving me the ability to notice what works and what doesn't in terms of student motivation. I was clearly able to distinguish which teachers most effectively motivated their students through the outcomes of each class. With that being said, there were many classes in which there was a clear lack of engagement among the students, and it always circles back to the teacher's execution of the lesson.

My second internship experience also played a large role in shaping my positionality. I was an assistant to the athletic director at a local school district. Each day I would assist with the preparation and clean-up of game days, along with supervising various games of multiple age ranges. While this internship may have been less hands-on, I was still able to gain great insights into my field, which have shaped my positionality. I constantly found myself taking note of the communication demonstrated between individuals to gain a better understanding of perspective within the field and improve my own communication. Seeing how coaches motivated their players to compete firsthand gave me insights I can transfer over to the classroom. On top of this, I was able to determine that the outcome of certain games can lead back to how the coach communicated with his or her players. Just like how a coach can influence his player's in-game performance, a physical education teacher can influence their student's performance just as much.

My positionality has changed over time with the help of my past experiences in physical education environments. I have opened my eyes to the true amount of power a teacher holds when it comes to their student's participation and engagement. While I was lucky enough to have very motivating physical education teachers throughout my middle school years, this is nowhere near the case for all students. I'm able to credit many of the skills I have today to my middle school physical education teachers; skills that have helped me thrive to this day. These include but are not limited to: my liking of trying new sports, my willingness to assist others in need, and my motivation to improve. With the effective use of intrinsic and extrinsic motivation in physical education, teachers all over the world can change their students' lives for the better.

## **Conclusion**

The purpose of this study is to analyze the benefits that intrinsic motivation has on student willingness to participate in physical education and physical activity outside of school. As mentioned, this research will benefit teachers, students, parents, and other professionals in the education field. A large number of students showing interest in self-improvement, growth, and change will forever benefit education as a whole, encouraging schools all over the world to adopt these techniques for their students. Intrinsic motivation itself relies on being self-determined.

This paper explores self-determination theory and strengthens our understanding of current research in childhood obesity, as well as how to motivate students using intrinsic and extrinsic methods. As stated earlier, self-determination theory suggests that people have three basic psychological needs that need to be met to foster growth and development: competence, autonomy, and connectedness/relatedness. When these three needs are met, students are proven to show better attitudes towards school and learning in itself. This theoretical framework is an appropriate lens because intrinsic motivation and being self-determined go hand in hand. In addition, being self-determined is a concept not often seen in physical education classes, although it has the potential to benefit every student greatly. When it comes to physical education, each student has their own specific needs that need to be met. Self-determination theory puts those needs first, addressing them at the start to leave the most class time for improvement. Chapter two will provide an overview of research in the field.



## **Chapter 2: Literature Review**

More and more students are choosing not to take physical education, and their reasoning can be traced back to how the students are being motivated to participate. The best motivational strategies have been absent from public schools for too long, and it is time to shed some light on intrinsic motivation and self-determination theory itself. Every teacher wants their students to become self-determined: setting their own goals, self-advocating, and working to achieve those goals for their own personal growth. Self-determination within a student can go a long way regarding physical education. When a student is self-determined, they are more likely to be intrinsically motivated, ultimately increasing their engagement and overall care for physical education class. The purpose of this senior thesis is to examine the best possible ways to motivate students in physical education, the ways which will promote self-determination and intrinsic motivation among students.

Over the last decade, research has continued to show that motivating students can be problematic but is necessary for physical education teachers. This problem can occur for all educators across K-12 schools. This literature review will focus on research that can be divided into two categories for exploration: motivation for students in physical education classrooms and negative implications of amotivation. Implications for practice within physical education classrooms will be examined in chapter three.

### **Motivation for Students in Physical Education Classrooms**

Research shows multiple extrinsic factors impact student motivation in physical education classrooms. This section of the literature review will unpack the value of various motivational techniques along with factors associated with intrinsic motivation and how they impact students within a physical education setting.

This section will cover a variety of topics, including the relationship between a teacher's need supportive teaching style and student motivation, the relationship between a teacher's interpersonal teaching style and student motivation, the effects of social factors and psychological mediators on motivation, the need for a mastery-oriented classroom environment, and the effects of participation in outside-of-school physical activity on physical education engagement in school.

### **Self-determination Theory and Intrinsic Motivation**

Hassandra, Goudas, and Chroni (2002) conducted research regarding the specific factors that are associated with student intrinsic motivation in physical education. Intrinsic motivation is a branch of motivation in which students are partaking in activities for their enjoyment, rather than for consequences or rewards. In this study, results were collected through various interviews with secondary physical education. The students were selected from a pool of 254 students based on their questionnaire scores. This qualitative study found that there are a variety of different factors directly affecting intrinsic motivation, and they need to be accounted for when designing physical education lessons.

Murcia, Coll, and Perez (2009) analyzed the relationship between self-determination theory and the motivation students have toward physical education. There are three basic psychological needs that need to be met if students are going to be properly motivated: competence, autonomy, and connectedness/relatedness. In this quantitative study, 440 Spanish students between the ages of 14-16 were measured for psychological mediators, motivation types, and physical education importance. It was discovered that the accommodation of things such as competence, autonomy, and connectedness creates a positive attitude toward physical education.

In this study, Ntoumanis (2001) tested a proposed model of motivation. Vallerand's model follows the form of social factors, to psychological mediators, to types of motivation, to consequences. Initiatives to enhance public health will go nowhere without proper motivation within physical education classes. In this quantitative study, results were collected through questionnaires of 424 British students ages 14-16 to examine the three basic psychological effects, along with cooperative learning, identification, external regulation, intrinsic motivation, and amotivation. The results of this study show that intrinsic motivation was related to positive consequences, whereas external regulation and amotivation were predictors of negative consequences.

The purpose of a literature review organized by Alderman, Beighle, and Pangrazi (2006) was to not just promote intrinsic motivation and perceived physical competence, but promote the need for a mastery-oriented environment. Physical educators can play a significant role in shaping the class environment. The class environment will ultimately promote intrinsic motivation and increase students' enjoyment of physical activity. In this study, various strategies for motivation itself and the proper environment were given. Evidence shows that with the proper environment, all students can be properly motivated to be physically active, in and out of the classroom.

Mannien and Yli-Piipari (2021) conducted an action research study with the purpose of exposing the public to the most up-to-date strategies for keeping students motivated in physical education. Physical education motivation directly affects a student's positive behavioral, cognitive, and affective learning outcomes. Amotivation present in physical education classes will ultimately create an inefficient class atmosphere. Self-determination theory is key to keeping students motivated. This kind of motivation sees self-endorsed decisions to participate from the

students. Some useful strategies mentioned include but are not limited to encouraging cooperation, providing choices, and acknowledging and respecting different perspectives in class.

A quantitative meta-analysis of 128 studies conducted by Deci, Ryan, and Koestner (1999) examined the overall effects of extrinsic rewards on intrinsic motivation in physical education classes. Data was found by analyzing the effects of rewards on intrinsic motivation for certain tasks. Results showed that completion, engagement, and performance contingent rewards have a negative effect on student intrinsic motivation. Student self-interest in physical education is completely undermined by extrinsic rewards. However, teachers who show positive feedback and support saw enhanced intrinsic behaviors among their students.

Ferrer-Caja and Weiss (2013) conducted a quantitative study to determine various predictors of intrinsic motivation in physical education among students. A sample of 201 female and 206 male high school students all taking physical education as a required course completed measures of intrinsic motivation, perceived physical competence, teaching style, motivational climate, self-determination, and more. Results showed that intrinsic motivation is directly associated with perceived physical competence. The two other strongest predictors of intrinsic motivation were motivational climate and goal orientation.

### **Leisure Time Physical Activity**

Cox, Smith, and Williams (2008) tested the relationship between motivation variables in middle-school physical education and student willingness to partake in leisure-time physical activity. Leisure-time physical activities are physical activities performed at the discretion of the individual, mainly outside of school. Surveys containing measures of study variables were completed with sixth and seventh-grade students currently enrolled in physical education. The

surveys were conducted on two occasions, one year apart. This qualitative study found that motivation-related constructs had a positive impact on willingness to partake in leisure-time physical activity. Student enjoyment in physical education activities fostered the relationship between self-determined motivation and leisure time physical activity behavior.

Shen (2012) examined the relationship between engagement in organized outside-of-school physical activity and self-determined motivation in school physical education. Three hundred and five males and two hundred and forty females ages 14-16 currently enrolled in physical education in the United States participated in the study. Self-determined motivation variables were measured on top of the participants being surveyed based on their outside-of-school physical activity as well. Results showed that students who participated in outside-of-school physical activity were more motivated to participate in school physical education. However, the strongest among the self-determined variables was for those who did not participate in outside-of-school physical activity.

### **Teaching Styles**

Ntoumanis (2009) presents a literature review that evaluates various studies conducted in different physical education classes examining the teachers' interpersonal style and its relation to student motivation. Also, this article demonstrates how the three basic psychological needs and various motivational regulations related directly to self-determination theory predict outcomes in physical education classes. The teaching style used by the teacher is a factor affecting student motivation that is often forgotten about. Multiple studies were examined in this article using a variety of different methods. Results of the study show that teachers using a positive and interpersonal teaching style have a positive effect on effort, and motivation in general. On top of

this, results show that basic psychological needs are predictors for behavioral outcomes in physical education.

Aelterman, Vansteenkiste, Van den Berghe, De Meyer, and Haerens (2014) conducted a quantitative study to examine whether physical education teachers can learn to value a need-supportive teaching style. Need-supportive teaching styles focus on autonomy-supportive and structured teaching strategies. The sample consisted of 39 teachers and 669 students. All teachers and students were measured on two occasions, a pretest at the beginning of the school year and a pretest three months later. Results showed that the intervention study led to a positive change in attitude among teachers in regard to self-determination theory and fostering a need-supportive teaching style altogether. According to students, autonomy support was increased along with positive changes in teacher structure.

De Meyer, Speleers, Tallir, Soenens, Vansteenkiste, Aelterman, Van den Berghe, and Haerens (2014) conducted a qualitative study in order to discover the relationship between controlled teaching behaviors and overall motivation in students. The self-determination theory framework has enabled researchers to find the connection between need-supportive teaching styles and overall motivation, but we know little about the effects of controlling teaching. In order to analyze controlled teaching behavior in a real classroom setting, 56 physical education teachers were videotaped. In addition, motivation was measured through a sample of 702 secondary education students. Although students have a history of not responding well to controlled teaching, this study found little association between controlling teaching styles and student motivation.

## **Implications of Amotivation in Physical Education Classrooms**

Research suggests that the absence of proper motivation in physical education classrooms can potentially harm students' futures immensely. This section of the literature review will present a variety of consequences and overall effects of amotivation and negative physical education experiences in general. This section will cover a multiple topics directly related to amotivation in physical education classrooms, including but not limited to the negative health effects of obesity, such as heart disease and strokes, and the potential for mental health issues such as depression, self-esteem, and anxiety. In addition, research for combatting the childhood obesity issue is presented.

### **Childhood Obesity**

K. Sahoo, B. Sahoo, Choudhury, Sofi, Kumar, and Bhadoria (2015) conducted action research on the causes and consequences of obesity among children. The article points out how obesity is yet to be fully understood, given the plethora of causes of the disorder. Portion size, activity level, environmental factors, family factors, and socio-cultural factors are just some of the underlying causes of childhood obesity. Evidence shows that obesity is directly associated with a child's self-esteem, confidence, overall emotional well-being, and even academic performance. While people are quick to assume that sugar and caloric intake are the main causes of obesity, researchers suggest that a decline in physical activity plays just as big of a role.

Nga, Dung, Chu, Tien, Thanh, Ngoc, Hoan, Phuong, Pham, Tao, Linh, and Do (2019) presented a literature review that evaluates the effectiveness of various techniques to combat childhood obesity. Childhood obesity levels have continued to rise worldwide, leaving the door open for life-long consequences amongst these children. While there have been many home, school, and clinic-based solutions presented, the authors investigate the overall effectiveness of

school-based interventions, while simultaneously reviewing the relationship between obesity and education. Factors investigated include nutrition and health education, awareness of teachers, teaching practices, and stress levels. Results show that education is only a part of the solution to childhood obesity, and more attempts from the community can help to combat this issue.

Cale and Harris (2013) conducted action research addressing current measures being taken to combat childhood obesity. The authors express their beliefs that the current policies and messages surrounding obesity are misleading, and may actually cause more harm. It is the job of schools and more specifically, physical education, to promote healthy lifestyles. This can not be done effectively if not all students are reporting happy physical education experiences. After going over some of the basic facts surrounding the obesity issue in school, the researchers lay out current recommendations for schools today, followed by practical recommendations of their own. Cale and Harris express how crucial it is for teachers to consider psychological and social characteristics when it comes to obesity in physical education.

Bryan, Broussard, and Bellar (2013) conducted action research describing the importance of not only the physical education teacher but also the school nurse when it comes to addressing childhood obesity. School policy is proven to not be as impactful as it should be in regard to combatting the obesity epidemic. Given the school nurse and the physical education teacher are ultimately the two directly involved in terms of obesity among students, it is their responsibility to inform not only students but parents of the lifelong consequences of obesity. The school nurse needs to take on a bigger role in promoting healthy choices and physical activity. The authors express the need for other opportunities for physical activity throughout the school day, other than physical education class.



Daniels (2006) conducted action research that covers the short-term and long-term effects of childhood obesity. Obesity is taking a large toll on the overall health of children in the United States. More often than not we see obesity-related issues in children that researchers thought to only be present in adults. Some of those issues include type 2 diabetes, high blood pressure, liver disease, and irregular breathing during sleep. Daniels goes into detail about how childhood obesity can speed up the development of health issues such as heart disease, strokes, and even heart attacks. The increase in obesity amongst children has the potential to reverse the increase in life expectancy this country has seen over the years. Children today are living unhealthier lives than their parents, and childhood obesity should be a top public health priority.

### **Mental Health Issues**

Wang and Veugelers (2008) conducted a quantitative study that analyzes the relationship between self-esteem, weight, and academic performance during childhood and adolescence. Self-reported self-esteem, physical activity, diet, along with height and weight were all measured in 4945 5th-grade students to determine the effects that obesity has on self-esteem and the overall mental health of students. Although body weight was proven not to affect school performance, results indicate that it negatively affects the self-esteem of said overweight students. On the other hand, students with a normal weight reported no negative effects on self-esteem. Mental health will ultimately improve if we see more schools promoting healthy and active lifestyles.

Rankin, Matthews, Cogley, Han, Sanders, Wiltshire, and Baker (2016) presented a literature review that covers the psychological consequences of childhood obesity. Currently, over 40 million kids worldwide are overweight, and by 2025 it is estimated to turn into approximately 70 million. A wide variety of studies were examined to determine the psychosocial and psychological consequences of childhood obesity. Results show that emotional

and behavioral disorders, depression, and low self-esteem are all much more likely to present themselves when the child is obese. It was found that non-overweight students had far fewer psychological issues when compared to their obese peers.

Biddle and Asare (2010) conducted a literature review to determine the relationship between physical activity and a variety of mental health issues. Literature searches were conducted in 2010 with the goal of finding mental health issues such as depression and low self-esteem directly correlating with physical education or physical activity in general. Results showed that physical activity interventions in school were able to improve a student's self-esteem and overall confidence. Regular physical activity was also proven to improve cognitive functioning and academic performance. Although, studies showed a poor association between mental health and energy expenditure. Without these interventions, physical activity has the potential to do more harm than good.

### **Summary**

As stated, teachers are seeing more and more students each day drift away from physical education. Without the proper forms of motivation, students will never be able to thrive in physical education, ultimately setting those students up for a plethora of consequences in the future. Some of those consequences include health issues such as heart disease and mental health issues such as depression and low self-esteem. With the presence of intrinsic motivation, we see these effects on a steady decline. With the right teaching strategies and class climate, we can better intrinsically motivate our students, benefiting their academic lives for the better.

## Chapter 3: Implications for Practice

### Revisiting Problem of Practice

This paper seeks to answer the question: How does effective motivation impact secondary students' willingness to participate in physical education and leisure time physical activity? In doing so, researchers hope to shed light on the most effective ways to motivate students to improve their physical education experiences and make them want to participate in physical activity in the future. As mentioned in chapter one, much research has been done on intrinsic motivation, and its ability to positively impact students in physical education. The theoretical framework was self-determination theory, as it goes hand in hand with intrinsic motivation. Students need to be intrinsically motivated to ultimately become self-determined individuals. This research has significance given the need to inform educators on how to intrinsically motivate students. Once one teacher has a successful group of intrinsically motivated students, ultimately more teachers will adapt those methods. As stated, intrinsic motivation, along with the proper teaching environment and teaching style will benefit overall motivation within physical education classes greatly (Hassandra et al. 2001).

Current research in the field results in key strands. The first strand examines motivation for students in physical education classrooms. Intrinsic motivation for students stems from a variety of classroom factors. Class climate and teaching style are just two of those factors ultimately impacting intrinsic motivation. The second strand considers the negative implications of amotivation. Students who are not properly motivated in regards to physical activity are at much higher risk of various future health issues. Those issues include but are not limited to mental health problems such as depression, and health issues such as childhood and adulthood

obesity, and even heart disease. This chapter will focus on the implications of this research and their application to practice in school settings.

### **Significance of Study/Implications**

With the vast amounts of information presented on overall effective motivation and intrinsic motivation specifically in physical education, there are various recommendations for the field that could benefit future generations of students. The first recommendation is for teachers to utilize strategies that enhance intrinsic motivation when creating lessons. Tips for teachers such as encouraging cooperation and acknowledging different perspectives have been shown to improve student motivation (Mannien and Yli-Piipari, 2021). Another recommendation for physical education teachers is to give their students opportunities to become self-determined. Allow your students to set their own goals and work at their own pace to achieve them. Improving the three basic psychological needs of autonomy, relatedness, and competence within students will ultimately increase participation and a willingness to succeed. The final recommendation is for schools to take it upon themselves to educate students and their parents on the negative effects of childhood obesity. To take the first step in getting students to be motivated to participate in physical education and live a healthy and active life, it is the job of the schools to inform families of the importance of physical education and the possible consequences a lack of physical activity may bring.

### **A Commitment to Lifelong Learning**

In order for a teacher to effectively promote intrinsic motivation among their students, they need to be aware of the various factors that directly associate with intrinsic motivation and incorporate them into their lessons. Success within practice relies on the physical education

teacher's ability to locate these factors. However, sometimes teachers may not be aware of what these factors are. School administrators should be encouraged to analyze current physical education teacher training methods to determine whether the necessary material is being covered. For example, providing physical education teachers with orientations before the school year starts could be a great way to get them up to date with the most effective motivational strategies. On top of this, additional undergraduate and graduate courses covering overall motivation and intrinsic motivation itself gets these individuals exposed to these ideas early on in their careers.

There are a number of courses that physical education teachers should take in order to be successful in the classroom. One, for example, involves informing teachers on how to assure their students are self-determined. There is no intrinsic motivation without self-determination, so it is crucial to get future physical education teachers aware of what self-determination is, how to incorporate it into lessons, and the effects it has on students' success. Studies show that accommodating the three basic psychological needs of competence autonomy, and relatedness, creates positive physical education experiences (Murica et al., 2009). Once these needs are met, students will ultimately become self-determined learners. Setting their own goals, making self-endorsed decisions, and working towards physical education success will help students and educators be successful.

An additional course future physical education teachers should be encouraged to take revolves around the most up-to-date strategies to intrinsically motivate students. Physical education teachers should be exposed to the effects of intrinsic motivation at an early stage, giving them time to perfect their abilities to incorporate methods into their lessons. Furthermore, the course should put emphasis on what factors directly impact intrinsic motivation. As mentioned, there are a variety of individual differences among students that impact intrinsic

motivation, such as the three psychological needs of autonomy, competence, and relatedness. However, future physical education teachers must be made aware of the various social-environmental factors that can affect whether or not a student is intrinsically motivated. Social environmental aspects of school such as the teacher themselves, social preconceptions, outside-of-school physical activity, lesson content, family activity level as well as family encouragement levels, classmates, and even cultural values can all have a significant impact on student intrinsic motivation (Hassandra et al. 2002). While not all individuals are going to know this right away, an additional college course would be a great way for these future educators to get exposed to this information. Colleges should offer a course called “Psychology of Motivation in Education” to meet these objectives.

While recommendations for additional courses on motivation within physical education training programs were mentioned, a course covering childhood obesity and its potential effects can be just as beneficial in motivating students. This course would mainly be for students and their parents, as hearing the potential negative consequences of childhood obesity would ultimately encourage them to take physical education seriously. It is the job of not only the physical education teacher, but the district itself to promote living an active and healthy lifestyle to families (Cale and Harris, 2013). Informing families of the potential physical and mental health risks of childhood obesity will remind them of the importance of physical education, ultimately sparking motivation to succeed.

### **Meeting Individual Needs**

The best advice to give to physical education teachers is to always consider the needs of each individual student when incorporating intrinsic motivation into lesson plans. Intrinsic motivation sees students performing tasks for pure satisfaction and growth rather than for

rewards or prizes. There are many strategies out there to use within practice to promote intrinsic motivation among students in a physical education class setting. First, allow students to make choices. For example, a teacher can provide a wide range of activities or sports to choose from. Students who feel as if they have a sense of control over their learning are more likely to perform a specific task. In other words, students are more likely to complete an activity of their choosing rather than complete an activity that was forced onto them by the teacher. Similar to this, teachers can provide choices within lessons, allowing students to modify lessons if they wish, which is proven to enhance intrinsic motivation (Alderman, 2006). Not all students perform at the same difficulty level. It is crucial for students who are not as experienced in the activity to have the opportunity to slightly alter the lesson for a better chance at success. An example within practice would be a student lowering a basketball hoop, or selecting a different, potentially softer ball that is easier to catch or throw for a handball unit.

Another useful strategy to increase intrinsic motivation to use in practice relates directly to the individual needs of each student: providing optimal challenges and goals for every student. Given the number of units in a physical education class every school year, there are bound to be experience-level differences among the students. Some students may have more experience in sports than others, as some students may play specific sports during their free time, or some students may not play sports at all. Therefore, It is crucial for teachers to differentiate the difficulty level of tasks given to students based on their personal level of experience (Alderman, 2006). For example, if students were participating in a basketball unit, the teacher can allow for the inexperienced students to start off with basic dribbling up and down skills. While on the other hand, the more experienced students may be practicing more advanced cross-over dribbling skills. Another example can be within a soccer unit. The students who already play soccer could

practice their passing in the air skills, while the inexperienced students could start off by passing on the ground with a partner. This allows for all students to improve their skills at the same time regardless of skill level, without other students being left behind.

Emphasizing personal improvement is another way to promote intrinsic motivation in a physical education setting. Every physical education teacher should make sure their students know that their goal is not for them to reach a certain skill level in a sport or complete a certain task, but their goal is to make sure each individual student improves. In a previous study, Brandon Alderman (2006) expressed the need for a baseline value for tasks and for students to set personal goals. One example of this in a physical education setting could come in a tennis unit. For example, a teacher can ask a student how many times they can hit the ball to themselves off a wall before messing up. Then, have them repeat the same task until they beat their previous score. This gives the student a baseline for improvement, allowing them to see firsthand that they are getting better every time they practice.

The best piece of advice to give to future physical education teachers when it comes to intrinsically motivating students is to provide instructional feedback as much as possible. As mentioned earlier, intrinsic motivation relies on the teacher meeting the basic needs of autonomy, relatedness, and perceived physical competence within students. Out of these needs, the backbone of a student wanting to participate on their own is perceived physical competence. If a student does not see themselves as able to complete a task or play a specific sport, they will never be motivated to try and learn. That is why instructional feedback is more crucial than ever. Even for small, beginner tasks, saying things like “I’m impressed with how you...,” or “Great job with the way you...,” can go a long way in building a student’s confidence. In addition, providing as much feedback as possible will ultimately allow students to accept more



challenges and risk failures. Knowing that the teacher is there for constructive feedback at all times will ultimately bring up overall self-esteem immensely. With that increased self-esteem brings an increase in perceived physical competence, ultimately increasing intrinsic motivation (Alderman, 2006).

### **Future Research**

One area future research should examine is the effects of in-class group work on overall student intrinsic motivation. Group work is something commonly utilized in classrooms, as it allows students to engage one another to build social skills and work together to complete a task or solve a problem. While effective, group work is not used by all teachers, as some may prefer for students to work independently. With that being said, there is little to limited research on group work's effects on student intrinsic motivation. If group work proves to be beneficial in intrinsically motivating students, this will ultimately lead to more teachers utilizing group work.

Research should continue to examine the effects of various teaching styles on intrinsic motivation. While this paper did mention multiple teaching styles that were proven to be successful in promoting intrinsic motivation, that is only a fraction of the ways in which different teachers teach. Given the number of teachers in the world, there will ultimately be a vast amount of teaching styles to emerge. Similar to the research done on interpersonal and need-supportive teaching styles, researchers should continue to do this kind of research on other teaching styles such as authoritative and controlling.

Nga et al. (2019) suggests further research is needed as part of the solution to childhood obesity. This claim is valid as these researchers point out that education is only a small portion of the solution to obesity among children. As child obesity levels rise it is important to try and combat this issue from all angles. As mentioned earlier, the researchers examined various home

and school-based interventions for tackling childhood obesity. However, it was discovered that the involvement of community efforts can go a long way in solving the childhood obesity issue (Nga et al., 2019).

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