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A Study on Teachers as Crucial Facilitators in Psychological Needs and the Quality of Student Participation in Physical Education

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Abstract:
Studying motivation is crucial for understanding why some students show strong levels of behavioural, cognitive, and emotional involvement in learning. In contrast, others lack interest, offer boredom, and withdraw effort (i.e., are disgruntled). This study applies self-determination theory (SDT) principles to analyze student involvement and disaffection in school physical education (PE). Our analysis focuses on the idea in Self-Determination Theory that meeting fundamental psychological needs (such as autonomy, competence, and relatedness) serves as the driving force for optimum motivation and well-being. Teacher tactics and class arrangements are evaluated based on their ability to meet or hinder these psychological demands. A mediated model illustrating a 'student-teacher dialectical' framework is offered to combine the considered material. Several suggestions from practitioners on enhancing student involvement in physical education are provided. Finally, the results of previous treatments in the school setting are given and analyzed.

Keywords: Physical Education, Teachers, Psychological needs, Student Participation, Self-Determination Theory.

Introduction

According to the World Health Organization (2010),[1] the lack of physical exercise is now the fourth biggest cause of death globally. Because of changes in demographics and the economy, children are seeing more and more chances to be physically active engineered out of their lives as they grow up in a world where technology and sedentary activities coexist. Adolescents (those between the ages of 13 and 15) in 80.3% of the nations surveyed reported engaging in fewer than 60 minutes of moderate-to-vigorous physical exercise daily.[2] Physical education (PE) provides children and adolescents with opportunities to be physically active, making it a particularly well-suited setting to combat physical inactivity. The factors that influence people's decision to be active are complex and exist at various levels of influence.[3] However, as mentioned in the studies by Dobbins, Husson, DeCorby, and LaRocca (2013),[4] the effects of physical education (PE) treatments aimed at increasing physical activity have been inconsistent, with the maintenance of behavior change being an especially elusive goal. Reasons for this include the fact that a large number of students come to school without enthusiasm for physical education. Instrumental attempts to raise physical education (PE) hours or to educate educators to use innovative instructional resources are likely to only succeed in the long run if students are actively involved.[5]

The primary goal of physical education intervention should be to increase participation. Our theoretical and empirical foundation for this analysis is self-determination theory.[6-9] SDT, which allows us to provide a thorough assessment of the engagement construct. The "what" (i.e., purpose) and "why" (i.e., rationale) of PE motivation, as well as the engagement that develops from that motivation, may be better understood with the help of SDT, a metatheory of human motivation.[10] At the outset of our analysis, we

define engagement and disaffection, two conceptual polarities in physical education (PE). Afterward, we include engagement and disaffection within SDT's scope and use the framework to explain how classroom settings may either foster or hinder students' intrinsic motivational resources and involvement. Finally, we wrap up with a review of relevant interventions and provide several practical suggestions to help physical education teachers enhance student participation.

Participation and Dissatisfaction in PE

Participation:

Researchers and practitioners could benefit from theoretical approaches to engagement in order to get a better understanding of the mental mechanisms that support active, enthusiastic, and long-term physical education involvement. Participation in school activities has been the subject of a great deal of literature evaluation. [11-13] For example, the model proposed by Skinner and colleagues has been extensively researched. Skinner and colleagues outline two crucial aspects of engagement—behavioral and emotional—in their bipartite model. The effects of these dimensions on physical education (PE) engagement are different, as will become apparent.

Participation Behaviour:

Being actively involved in learning activities is what Skinner and colleagues[14] mean when they talk about behavioural engagement. Effort, exertion, and perseverance are all parts of it, as are mental efforts like paying attention, asking questions, and participating in class discussions. Because children's perseverance and effort level correlate with their skill development and success in accomplishment settings like PE, it is crucial to comprehend behavioural engagement.[15] Participation in physical activities over the long term is encouraged by these competencies, which in turn encourage resilience in the face of adversity

Emotional Participation:

In the classroom, affective and cognitive responses are components of emotional involvement. Interest, focus, pleasure, contentment, and satisfaction are a few examples of these responses.[16] These characteristics of school involvement have similarities to previous models of general work and sports engagement. This is because—as noted by Curran, Hill, Hall, and Jowett (2015)[17]—both speak to the positive thinking patterns and feelings that usually go hand in hand with effective participation incentive strategies.

For kids, however, emotional involvement is more than simply an experience result. It has significant effects on kids' long-term perseverance in physical education as well. Because it supplies the psychological energy that both initiates and maintains engaged behavior, emotional engagement in this sense complements the behavioral parts of engagement in the bipartite engagement paradigm. Studies conducted in PE and education corroborate this idea. For instance, over time, higher effort and perseverance in school are predicted by elements of children's emotional involvement, such as excitement and good affect. It is also well known that children's choices to continue in sport and physical education are largely influenced by their level of fun and satisfaction. In light of this, it is possible to see children's displays of pleasure, curiosity, contentment, and happiness as crucial emotional preconditions for their sustained engagement in physical education.

A lack of affection:

Children often display indicators of disengagement from school rather than involvement. [18] The negative pole of the engagement continuum is occupied by disaffection. It describes the pre-disengaged emotions and behaviors of kids who feel helpless or whose motivation has been undermined by boredom or apathy, as well as by coercion, over-competitiveness, pressure, and/or conditional regard, as well as by these factors combined. Disaffected behaviors, such as apathy, lack of initiative, lack of effort, and giving up, may appear when the chance for active withdrawal is limited, as is the situation in schools. These behaviors indicate mental or emotional, but not behavioural, withdrawal. [19] Hence, disillusionment serves as a significant motivating factor for children's helplessness, which hinders their progress in physical education.

A behavioural disconnection:

Disaffected behaviors, according to Skinner and colleagues[20], include passivity, lack of initiative, lack of effort, and giving up—all of which are often linked to pre-disengagement. Additionally, they contain signs of ceremonial engagement and mental retreat, including a loss of focus and attention. These behavioural disaffection characteristics essentially represent passive engagement. Therefore, behavioural disaffection does not aid in the development of competence in PE, in contrast to behavioural engagement. Disaffected behaviors, hence, tend to mirror those linked to helplessness and enervated functioning, coupled with other characteristics. Research indicates that dissatisfaction is linked to low success, poor coping strategies, motivational deficiencies, and decreased resilience in the classroom. However, there hasn't been much research done to look at behavioural disaffection in the particular setting of school physical education.

Affection Devoid of Feeling:

Disaffected emotions reflect estrangement (anger and irritation), weariness (sadness and boredom), and negative cognition (fear and concern). As a result, these emotional disaffection factors include a wide range of unfavorable attitudes and sensations in the classroom. Many studies in PE have looked at different aspects of emotional disaffection, including boredom. These emotional disaffection characteristics are often taken into account in these studies as outcome variables that represent the adverse experiences or "ill-being" of the youngsters. As such, emotional detachment might be seen as a crucial emotional marker of kids' exhaustion and lack of interest in physical education.

An SDT View of Dissatisfaction and Participation

SDT:

The humanistic, [21] psychoanalytic,[22] and developmental[23] schools of thought on human nature provided the groundwork for SDT's organismic view of motivation. When it comes to reaching one's full potential and maintaining healthy mental health, all of these traditions stress the significance of inward growth. But SDT goes a long way beyond that in terms of meta-theorizing. As we'll see in the next section, SDT posits that basic psychological needs (i.e., social contexts that support feelings of autonomy, competence, and relatedness) are the driving forces behind organismic tendencies toward self-actualization and psychological wellness. Similarly, when people's social environments make an effort to impede their fundamental psychological needs and behavioral integration, it may lead to feelings of control, criticism, and alienation. Thus, SDT provides helpful guidance for educators on how to tap into students' innate motivating resources to boost participation or avoid boredom with physical education.[24]

Basic Psychological Need Theory:

A mini-theory of SDT called basic psychological need theory (BPNT) formalizes the role of innate motivational resources in self-actualization and engagement. Similar to the foundational principles of SDT, BPNT originates from organismic psychology. The term "needs" is used here to refer to the intrinsic requirements for an organism's proper growth, development, and overall health. Thus, a subset of these requirements that is critical to the organism's physical, mental, and social well-being is psychological demands.[25] In BPNT, we learn about three psychological demands that, according to the theory, are the driving forces behind children's innate curiosity, need for novelty, and ability to rise to difficulties. The first one is the urge to feel that one's actions are intrinsic to who one is. According to Deci and Ryan[26], it stands for the fact that one's actions are supported and decided upon by oneself. The second is competence, which is defined as the confidence in one's ability to manage one's relationships with the world around them. This demonstrates a natural inclination to tackle and excel at activities that are goal-oriented. As for the third, relatedness, it's the desire to have strong relationships with important people. It represents the desire to be involved in relationships that are loving, supportive, and characterized by mutual response.

The BPNT's Empirical Foundation in PE:

Humans achieve their full psychological, social, and behavioral potential when given the chance to exercise their autonomy, develop their competence, and form meaningful relationships, according to BPNT. Therefore, adaptive outcomes like engagement should be positively predicted by psychological requirements and the environmental conditions that enable them. Several studies have demonstrated that

when psychological needs are met, it leads to optimal performance in various areas of life. Also, according to previous research [27-29], psychological needs support is a predictor of improved optimum functioning in the same areas. Both individual assessments and teacher ratings of motivated behavior have demonstrated that psychological needs positively predict adaptive behavioral outcomes, such as persistence and effort in physical education (PE). Further supporting these findings, research by McDavid, Cox, and McDonough (2014)[30] and Taylor et al. (2010)[31] showed that when people's psychological needs are satisfied, they engage in physical education more at the between-person level and also increase their physical activity and engagement within the person over time.

Facilitating the Satisfaction of Psychological Needs

Consequences of satisfying psychological demands and the important precursors to these wants are both addressed by SDT. In SDT, social environments may either help or hurt children as they actively seek to meet their most fundamental psychological needs. Therefore, it is believed that children's psychological needs interact with environmental circumstances, especially teacher actions, in the classroom. Consequently, there is a two-way street between the instructor's actions and the students' motives. Teachers provide children with sources of incentive that they absorb as they pursue autonomy, competence, and relatedness.

At its core, SDT's student-teacher dialectical paradigm is this two-way street of relationships between students' intrinsic motivating resources and instructors' actions. Synergistic outcomes (i.e., teacher behaviors that are concordant with children's psychological needs) leading to heightened engagement will occur in student-teacher interactions to the degree that children can build competencies, exhibit curiosity, voice opinions, and follow their interests. Antagonizing student-teacher interactions (i.e., when teachers' actions are at odds with students' psychological needs) leads to disaffection, and this is proportional to how much teachers' actions stifle students' natural curiosity, expressiveness, and pursuit of interests. When it comes to physical education, it's not only the instructor who may affect the fulfillment of students' psychological needs. Factors at a more macro level, such as societal standards, school principles, and school structure, as well as interactions with parents and classmates, have a role. Nevertheless, the student-teacher connection has immense significance in the PE context. Researchers have dedicated significant effort to comprehending its dynamics through the lens of SDT.[32]

Different Approaches to Teacher Structure & Motivation

Competency development is the primary responsibility of physical education teachers and other educators. They usually do this via the use of many levers, such as well-defined expectations, incentives, objectives, assistance, support, and feedback. The concept of structure is "the extent to which [socialisers] provide clear and consistent guidelines, expectations, and rules for behaviors, without respect to the way in which they are promoted," and it is one of the key environmental sources of competence support within SDT. The supply of resources needed to foster achievement-related abilities is what SDT means when it talks about structure. Children learn to follow rules and predict the reactions of others in structured situations because these environments are consistent and reasonable. Children develop internal schemas about the relationship between their acts and the results as a result of this system. Without structure, children see learning as disorderly and report feelings of inadequacy, loneliness, and powerlessness.[33]

Interpersonal Control and Assistance with Autonomy

Traditional research within SDT has shown that two distinct motivational types limit the impact of structure on children's motivation and engagement; however, newer studies are shifting the focus to both "need-supportive" and "need-thwarting" social settings. The extent to which instructors foster student initiative, active problem-solving, and a child-centered rather than a teacher-centered viewpoint in physical education is known as autonomy support. Other scholars have outlined the main features of autonomy support. For instance, by recognizing negative affect, Grolnick and Ryan (1989)[34] and Reeve

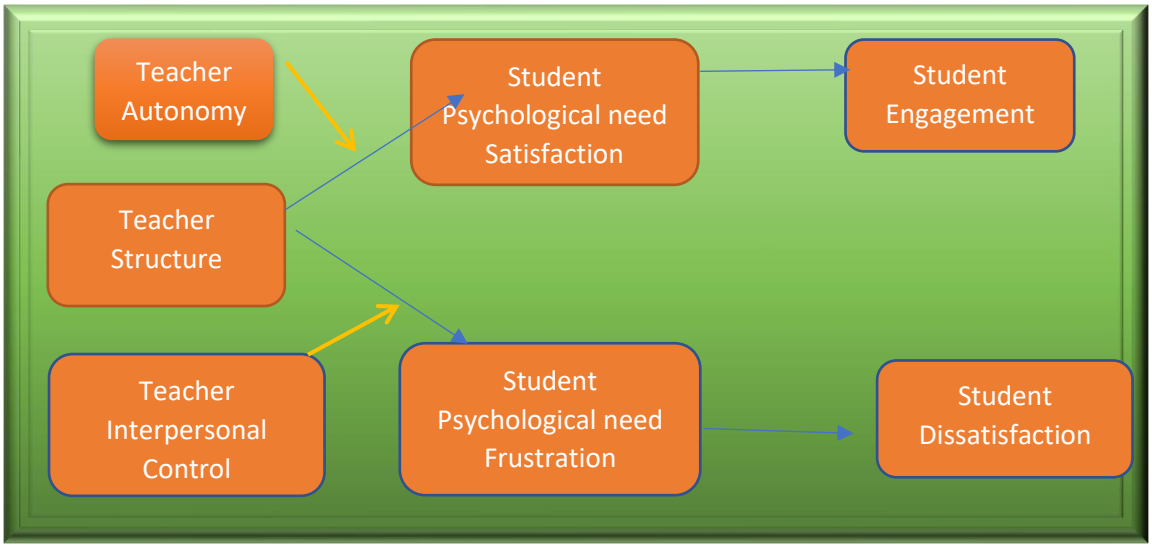
(2006)[35] stress the need to respect children's ideas and emotions. Referring back to Koestner, Ryan, Bernieri, and Holt (1984),[36] this psychological aspect of autonomy support is associated with the idea of teacher empathy. Giving people the freedom to choose and work together to make decisions is another way to help them feel more in control of their own lives. Last but not least, Assor, Kaplan, and Roth (2002)[37] agree that encouraging children to speak their views freely is a crucial part of autonomy support in order to help them become more self-reliant. By bringing these positive ideas together, children can identify with and support structuring events, which in turn helps them meet their psychological needs and become actively involved.

A regulating motivating approach is the second one that has been proposed to mitigate the impact of structure on kids' physical education participation. According to various studies, children whose instructors exert excessive control over them are pushed to conform, find solutions to issues on their own, and see the world through the teacher's eyes instead of their own. According to Bartholomew, Ntoumanis, and Thøgersen-Ntoumani (2010),[38] the concept of teacher control encompasses both the physical manifestation of controlling behaviors (such as rewards, pressure, and harsh punishment) and the psychological manifestation of control (such as guilt inducement and conditional regard). These rules irritate children's psychological demands, leading to dissatisfaction, since they prevent pupils from relating structural occurrences to their own lives.

Modeling Student Participation and Dissatisfaction via Mediation

Before this, the student-teacher dialectical framework was defined, and comparable frameworks have been presented in the literature of sports and healthcare. Extensive research in physical education (PE) and related fields has examined the ways in which motivational climates, feedback, competition, and teacher motivational style affect students' psychological needs. Jang, Kim, & Reeve (2012: 2016), [39] and Skinner (2009)[40] are just a few examples of recent studies that include motivational style research into assessments of a comprehensive student-teacher dialectical framework. Figure 1 depicts a mediation model that these experiments are based on. In addition to measures of engagement and disaffection, children describe their judgments of their teacher's level of control and support for their autonomy, as well as their satisfaction or dissatisfaction with psychological needs. In Figure 1, the horizontal lines depict theorized causal linkages. These correlations postulate that changes in the psychological requirements of students, as a result of changes in their motivational style, lead to changes in their degrees of engagement and disaffection with the subject matter.

Figure-1: An SDT-informed mediation model of PE engagement and disaffection.



Source: Adopted from Jang, Kim, & Reeve (2016), and Skinner (2009)

Jang et al. (2012)[41] discovered longitudinal evidence for the mediated impact of mid-semester psychological need fulfillment on children's semester-end classroom engagement via teacher autonomy support at the beginning of the semester. This research was very insightful. These authors also observed several reciprocal effects that support a mediation hypothesis couched inside SDT in various ways. Most remarkably, there was a reciprocal association between psychological need fulfillment and engagement, a result that has since been repeated in sports and education. Nonetheless, motivational styles and engagement also have a reciprocal relationship in addition to psychological requirements and engagement. In reference to the latter, Jang et al. (2016) demonstrated that rises in student dissatisfaction and engagement, respectively, forecast rises in teacher autonomy support and control. Taken as a whole, these linkages point to a positive upward cycle in which improvements in behavioral engagement reinforce higher levels of autonomy support, which in turn lead to greater psychological need fulfillment and so on. It's noteworthy, however, that these statistics also demonstrate that although autonomous support may start this upward spiral, control may also stop it. In light of these findings, more investigation is now required to explore the mutual interaction between students' behavioral and emotional involvement in physical education settings, need-supportive environments, and agentic engagement.

Recommendations for Practitioners

Delivering Support for Autonomy:

As we've seen, one way to create and promote motivationally adaptable settings for the growth of student participation is to structure physical education environments to enable autonomy. The ability to effectively provide autonomy support is thus a crucial one for PE teachers to master. Reeve (2006)[42] offers a final proposal that includes specific actions that include the four types of autonomy support mentioned above. Reeve have identified these autonomy-supportive behaviors as follows: (a) listening intently; (b) fostering curiosity and self-initiation; (c) offering opportunities for peer learning and cooperation; (d) setting up learning environments that encourage active participation; (e) encouraging effort; (f) praising development and mastery; (g) providing progress-enabling feedback; (h) consistently answering subordinates' questions and queries; and (i) communicating a clear acknowledgment of subordinates' perspectives. Although there may be some disagreement over the inclusion of some of these actions as autonomy supports (for example, f and g are more indicative of competence support), they nonetheless provide a helpful framework that instructors may utilize to inform their motivating approach. The results that we have examined unequivocally demonstrate that these actions have the positive effect of enhancing psychological need fulfillment, which in turn supports student involvement in physical education.

Establishing a Structure:

Figure 1 shows that the orthogonal relationship between autonomy support and structure is synergistic, meaning that both contribute to the prediction of higher levels of involvement by satisfying psychological needs. The components of structure within SDT have received much less attention compared to the extensive study and recommendations on autonomy support. Still, we have a foundation for imagining possible structures thanks to Reeve (2006). Here, Reeve posits that, at various points during the learning process, three distinct structural components take place. They consist of (a) outlining the objectives, rules, and expectations for the learning activity beforehand, (b) providing assistance, direction, and supervision while the activity is underway, and (c) providing feedback that is positive, constructive, and information-focused on the job at hand after the activity. Students who get structure should feel capable of efficiently interacting with their physical education (PE) contexts, which is defined as meeting children's basic demand for competence.

Measures taken to address issues:

Equally effective within the realm of physical education have been programs that promote autonomy. Tessier et al. (2010)[43] used an 8-week training cycle to educate French high school PE instructors on the

application of autonomy support. Following this, they implemented an individualized guidance program, drawing upon the work of Reeve et al. (2004) as a reference. Compared to a control group that did not participate in the program, instructors in the experimental group were more likely to engage in actions that promoted student autonomy. According to Aelterman, Vansteenkiste, Van den Berghe, De Meyer, and Haerens (2014),[44] physical education teachers' autonomy-supportive actions and attitudes are positively impacted by similar training programs. Last but not least, building on these findings, Cheon and colleagues demonstrate that during a Korean high school semester, students are more engaged and less likely to be disaffected when physical education teachers undergo at least two sessions of autonomy-supportive instruction, spaced three weeks apart. Additionally, the authors demonstrate that, in line with an SDT-informed mediation model, the intervention that promoted greater autonomy for physical education teachers led to a decrease in psychological need frustration and an increase in student psychological need satisfaction, which in turn led to changes in student disaffection and engagement.

Concluding Remarks

Participation in physical education (PE) classes is a great way for kids all around the globe to get moving. Therefore, physical education has enormous promise as a means by which children's health and well-being might be improved. With SDT as a framework, this study aimed to provide an overview of how engagement is fostered in PE and describe the salient components of engagement, with the hope that academics and practitioners would be able to achieve this potential. Within SDT, engagement is greatly impacted by the satisfaction of psychological needs for autonomy, competence, and relatedness. These needs promote behavioral integration and, as a result, associated emotions and behaviors like enjoyment, vitality, positive affect, persistence, concentration, and effort. It is crucial to prioritize providing children with enough opportunities to develop their competencies, self-direct their actions, and form connections with others. In physical education, these chances abound when instructors offer pupils autonomous support (such as voice, choice, and initiative) within a framework of structure (such as rules, limitations, and feedback). Alternatively, when used in a controlling context (such as punishment, compulsion, or conditional respect), the same structure thwarts such chances. We believe that instructors will find our suggestions for providing autonomy support to be a helpful starting point in encouraging students to become more involved in physical education.

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