# Time in Sport Pedagogy: A Review of the Evidence

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**ABSTRACT**: This article offers a comprehensive overview of the existing literature in sport pedagogy on time-related studies. The research is organized and analyzed into four categories: how time is conceived, how time is measured, what is known about how time is used in physical education and sport contexts, and what is still unknown about time-related activities. In the part, a sixpoint agenda for extending and continuing time research in sport pedagogy is proposed. Sport pedagogy is a branch of sport science concerned with educational processes including exercise, movement, play, and sport. Traditionally, structured physical education in schools has been emphasized with the aim of promoting children's and teenagers' growth and enabling them to engage in a range of sports and movement cultures. As a result, sport pedagogy and sport didactics are inextricably linked. There is no question that a serious, contributing science of sport pedagogy has only been present for a few years, regardless of how one defines it or whether one wishes to include or omit specific aspects of it.

**KEYWORDS**: Education, Physical Education, Scientific Community, Sports Pedagogy, Time Management.

## I. INTRODUCTION

We've announced its coming, distanced ourselves from much of its history, and are now moving forward in ways that clearly indicate that we're just getting started in our efforts to create and extend research on teaching in physical education, or sport pedagogy[1]. Because this essay will contain results from coaching studies, I'll use the European word sport pedagogy instead of our own term research on teaching physical education to describe methods of researching the teaching and acquisition of motor play abilities in a variety of settings. According to my calculations, athletic pedagogy has only been used in the United States for approximately 15 years. Despite that little history, there have been no shortage of factors, procedures, results, or contextual idiosyncrasies in the conduct of teaching and learning[2].

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Adit Jha, Assistant Professor, Department of Agribusiness Management, Vivekananda Global University, Jaipur, India (Email: adit.jha@vgu.ac.in) We have already developed a large list of research interests and specialties, all easily included under the tent of sport pedagogy, perhaps owing to our threefold commitment to general education, physical education, and more formal sport coaching. This is supported by a fast scan of the first five indices of the Journal of Teaching in Physical Education[3].

There are studies of teacher expectations, teacher personalities, interaction analysis, teacher preparation, teacher and student time management, teacher concerns, sex equity in the gym, teacher and student socialization, cooperating teachers, enthusiasm, several presage product and process-product relationships, supervision, student and in service teachers, tea, and several other topics among the approximately 100 articles published[4]. This evergrowing list of study topics shows the impact of a number of factors: (a) The teaching-learning act is complicated enough, and effective teaching is definitely contextspecific enough, that it justifies examining it from a variety of angles, contexts, and factors. (a) We have blatantly copied study variables and methods from other disciplines and then reproduced them in the field of physical education and coaching. Simply said, those other disciplines have a lot more researchers and ideas than ours. So, if we choose to pay attention to what's going on elsewhere, we often act collectively like a person standing at the bottom of a waterfall with a bucket, trying to catch as much water as we can in one bucket while more and more pours down on us but, for many of us, getting wet has never felt so good. (c) In relation to the second point, the reality remains that few researchers have received formal training as sport pedagogics. Those with training in fields unrelated or peripheral to sport pedagogy are more prone to allow their initial interest drive current research rather than applying pedagogical methodological skills to questions more fundamental to the teaching and learning acts themselves[5]. (c) We have no agenda for sport pedagogy in the United States, even in the broadest meaning of the word. However, as a scientific community, we have not been completely diverse. We have a good understanding of two aspects of the teaching-learning process: how instructors and students interact in the gym and how they spend their time pursuing learning goals. The former approach is known as interaction analysis, and it is the finest and most well studied branch of sport pedagogy research to date. The latter, time research, has its own welldeveloped line of study, albeit it is undertaken by a larger number of individuals in more locations than interaction analysis[6]. Interaction analysis study has merged with time research in certain cases, but for the most part, these two areas of inquiry have stayed independent and distinct. I'd like to go over four topics related to the time research base we have: (a) how we have conceptualized time, (b) how we have measured time, (c) what we know about how teachers, students, coaches, and players spend time, and (d) what we still need to know, despite our apparent preoccupation with time thus far. It's sometimes easy to tell how much someone understands about a topic by the questions they ask, rather than the answers they provide[7]. That may have something to do with how sport pedagogics have conceptualized and studied time throughout the years from all possible angles and permutations as a collection of process variables. The more we learn about time in general and in physical education, the more skilled we get at asking questions that advance both our understanding of it and our capacity to perceive it as a very complicated collection of factors. "What's going on in gym?" was the first question asked, just to get a sense of how instructors and kids spend their time together. These now-classic descriptive-analytic investigations influenced our early knowledge of time and gave us the first systematic explanation of certain time-dependent gym activities. Putting Theory into Action Monograph depicts their shock at what occurred when they were asked a simple inquiry such, "What's going on here?" We were able to ask additional, more difficult questions about "an underlying structure of everything that happens in physical education courses" as a result of this one attempt[7]. But where did we intend to go? Early time studies were restricted to reporting occurrences in the gym and could only serve to alert us to an apparent waste of time by physical education instructors and pupils. We appeared to understand that time was an essential factor in teaching and learning, but we couldn't explain why. Fortunately, the answer to "how come?" was being revealed at the same time as the Data Bank Project, which greatly aided us in asking more complex and targeted inquiries regarding temporal factors[8]. The focus on the connection of time-dependent factors to student success results has already advanced teaching effectiveness research in the educational mainstream. This study not only provided some excellent reasons why time is essential to study since it is related to learning, but it also led to a lot of great questions for researching time in physical education[9]. We had, all of a sudden, a rapidly growing body of research on teacher effectiveness to draw comparisons from and encourage our own efforts during study time; even better, we got a lot of assistance in asking more and better time-related questions[10].

## **II. DISCUSSION**

Taking the premise that certain time-dependent factors may be able to tell the difference between more and less successful instruction. It would be deceptive to suggest that we know for certain that in physical education, time is linked to learning. We have some proof of this. It is, and there is some evidence to indicate that humans need even more sophisticated conceptualizations. To fully address the question, you'll need a lot of time. We have assumed, however, that when we analyze student time on task, we would find are witnessing an acceptable surrogate for selflearning. The above-described ten questions, as well as a few more not stated, continue to help us think about time at the gym differently. It seems that, for the time being. We now have a sufficient quantity and understanding of timedependent issues to go further. We should be able to go through the next several years with relative ease. Let me outline a few broad assumptions about how we think about. In sport pedagogy, time is used as a collection of study variables. First, we've changed the focus. The study of time-related variables is the focus of this project. Our first inquiries were mostly concerned with the way instructors used their class time We are now asking additional questions. Berliner's thesis is directly focused on student time factors that how students use instructional time has a greater impact on learning outcomes. Teachers have a different perspective than students. We were able to change our views of "teacher" as a result of this significant transformation. Teacher as facilitator" has replaced "teacher as performer."

"They must," the first argument asserts. "I taught them properly," the former says, while the latter wonders, "What can I do?" To encourage students to engage with the material in meaningful ways?" What do educators do? is significant, but only when seen through the eyes of a student in a classroom. Accomplishment and behavior Second, when we transitioned from teacher to student conduct, we also transitioned from teacher to student behavior shifted from class-level analysis to individual student observation for time-dependent outcomes measures. We soon discovered that old standbys like the "51 percent rule" were no longer valid were simple to use, but they drastically distorted what the other 49% of students thought. As we delved further into each layer of analytic focus, we saw a pattern of activity. Even for seasoned veterans the truth of how each student's "P.E. day" varied so drastically was shocking to onlookers. It came as a shock to him or her from others around him. Third, we continued to create increasingly discrete and complex temporal variables. Terms like management time, activity time, and listening time were no longer used time, as well as traditional waiting times, are sufficient to meet the uniqueness of the situation. Our inquiries Terms like functional curriculum time and time-on-task were required. There is undoubtedly a link between the evolution of our time conceptualizations and the technology we've employed to assess time-dependent variables. However, much like the age-old issue, it's difficult to say whether the conception chicken or the measuring egg came first. Do we have a better understanding of time because we've learnt to ask better questions or because we've developed better instruments for studying it? It was most likely due to a subtle ebb and flow between our growing thoughts and novel methods to turn those ideas into valid and trustworthy facts. In any case, we may look back on the evolution of time measurement, just as we can look back on the evolution of time ideas in sport pedagogy. It all seems straightforward, and it looks to be a simple logic to follow-until the sport pedagogic starts asking complicated questions about how students use their time in class or at practice. It's uncommon to be able to constantly monitor all participants in a class or practice for various performance criteria using a single accurate measurement criterion. As a result, we may be forced to employ improvised performance standards, less-than-valid measurement criteria, and thinly sample individuals throughout the course of an observation

session. Only studies that directly assessed time-dependent variables will be included in a subsequent evaluation of results. In physical education and sport, the methods we've employed to track time closely mirror our development from basic to complicated, general to particular concerns about how time is spent and how it relates to learning objectives. Because we didn't know what was out there at the time, the early systems were like fishing nets, with numerous categories catching whatever we could for our descriptive-analytic efforts. Behavior of Students in Physical Education System was first developed in 1975. "Thus far, the descriptive-analytic effort has only scratched the surface of that complexity," he said, expressing what I think were the views of the sport pedagogy community at the time regarding our need for more complicated measures of occurrences in the gym. We can learn a lot more from ever-more complex descriptive systems and more creative methods of evaluating and combining data. In the case of time-dependent variables in athletic pedagogy, we had already started doing so. A more concentrated attempt to look at particular aspects of teacher and student time developed shortly after, reflecting the increasing literature on successful teaching. We were able to concentrate on a smaller number of temporal factors possibly linked to student learning with each successive process-product research. We stopped chasing "everything that swims in the water" and started catching just what we needed using custom-designed nets analytic systems. We grew more discerning in our demand for timedependent data, and we looked for bottom-line factors that could be measured more cheaply. Easily the most often utilized method for gathering time-dependent information. These systems, some of which seem to be very complicated, really try to separate out more and less relevant student time categories as observations are collected; they serve as a filter, ultimately enabling only specific types of behavior to be analyzed. Few studies of time in physical education since 1980 have been conducted without it or an inventive new version of it, perhaps as an indication of the original ALT-PE system's viability and flexibility. Physical Education Teacher Assessment Instrument, which has been employed in a well-sequenced set of research in recent years, is a noteworthy exception. This section will include summaries of the research on time-dependent measures in six areas: teacher time, student time, time and accomplishment, manipulating time in experimental investigations, coaches' time, and players' time. It is not meant to be a comprehensive, annotated overview of the extensive research base in these fields; rather, papers were chosen to illustrate each of the six categories mentioned above. Teachers often do not pay attention to time management while preparing for class, which may be linked to the first two. According to the increasing body of research on planning, instructors are more inclined to create plans based on activities and student pleasure than on effective time management. For starters, students, like their instructors, spend a significant portion of their class time engaged in nonfunctional activities-behavior that is unlikely to contribute to the desired learning results. This reality for physical education students has been documented many times in our literature,

and it has also been mentioned by non-sport pedagogics. Even though we still need to learn a lot more about the relationship between student functional time variables engagement, ALT-PE, Content-P.E., motor appropriate, and criterion trials and achievement, we do have some evidence to work with. When reviewing the excellent research on effective methods to increase student functional time, it's important to remember that in most instances, baseline rates were very low to begin with, making substantial interventions both probable and simple. Regardless, we have a lot of knowledge about how to influence time-dependent factors in sport and physical education. First and foremost, interventions should be active rather than passive. Providing descriptive feedback to teachers on low rates of functional time is unlikely to result in higher rates. Fourth, these consistent results were achieved primarily through simple and ecologically valid interventions; we were not afraid to assist real teachers in improving their relationships with real students. Fifth, we've started formulating broad strategies for extending functional time. Because of the consistency with which we have demonstrated how to increase functional time, at least one attempt to systematize the process has been made. As previously stated, only a few duration or interval recording-based studies of coaches' time in practice have been completed to date; much of what we know is based on event recording, as the well-known study established. Other details about how coaches and players spend practice time are almost certainly known. A search for information from promising titles, on the other hand, frequently leads to numerous inaccessible master's theses, insufficient data reports in DAI, and difficult-to-find papers from regional, national, and international conferences with no proceedings. Our inability to learn more about formal sport teaching and learning processes is hampered by our reliance on inaccessible, and often un reviewed, studies of coaches and players. Let me start by saying what I believe we don't need to know more about in this last part. We now have enough simple and broad accounts of life in the gym for educational research purposes. We've shown convincingly that instructors and students spend far too few minutes in class engaging in effective teaching-learning activities; we don't need to hear this bad news again (lest we consider killing the messenger!). This isn't to say that more advanced, clever, creative, or technologically advanced methods of concentrating on time-related processes in physical education should be avoided. Such descriptions and new methods of obtaining them are constantly useful. With that in mind, I'd like to propose a brief study agenda for timedependent research in sport pedagogy. First, more timebased explanations of what coaches and players do are still desperately needed. The coaching act is a relatively unexplored topic in sport pedagogy, whether due to its inaccessibility at times or a lack of academics interested in it. Third, while finding more evidence than expected before to this study, I am not persuaded that we have a sufficient process-product foundation on time dependent variables. Sure, we've made progress, but the majority of it has come from short-term studies of single-content regions in restricted ecological contexts. In physical education, we just don't have enough generalizable data regarding the connection between time and student performance. Is time the most important variable to investigate? In physical education, motor skill practice may take place under one or two legitimate performance criteria: time and frequency. Our early studies focused mostly on time-based factors, but we have recently begun to include dimensions such as frequency and quality of tries. Fifth, more experimental research on methods to enhance and maintain good time management in physical education is urgently needed. Teachers should be active participants in the process, and ecologically sound methods for preserving time as a valuable resource for students should be explored.

## III. CONCLUSION AND IMPLICATION

Teaching research frequently seems to be defined by a constant quest for the next greatest thing, constant discovery, short but intense love relationships with, and then abandonment of whole fields of study. We typically stick with anything for a short period of time, gaining enough familiarity to ask-but not properly answer-a number of crucial questions. I believe we've done it with time-dependent variables once again. Some of the finest recent written work on time appears to handle it in the past tense, as if we don't need to know anything else. Due to the large number of courses completed, this rejection is reasonable in general education. However, given the absence of a similar knowledge foundation in athletic pedagogy, we believe our rejection is premature. Regardless, some of us have moved on to other loves, such as those mentioned at the beginning of this piece. The present reform movement in teacher education has momentarily diverted some people's attention. For these and other excellent reasons, time research seems to have slipped out of the spotlight in sport pedagogy for the time being. So, when time research resurfaces as it frequently does, sport pedagogics will discover that the 1970s and early 1980s produced a rich and promising literature waiting to be reacquainted with. It's a literature that not only offered a few desperately needed answers, but also left them with a lot more desperately needed questions to contemplate.

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