

METHODOLOGY

A Qualitative Investigation of Middle School Students' Perceptions of Appropriate Instructional Practices in Physical Education

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Abstract

Many middle school (MS) students have been exposed to inappropriate instructional practices in physical education (PE). Involvement in and exposure to these inappropriate instructional practices becomes a common occurrence, causing students to believe this is what should take place in their PE class. The purpose of this study was to better understand MS students' perceptions of and attitudes toward appropriate instructional practices (AIP) in their PE classes. This study generally found from interviews that students perceived dodgeball to be acceptable, that wearing prescribed clothing (school shirt) will earn an easy "A," and that having captains pick teams in front of the whole class is an appropriate practice for PE class.

In 1992, the Council on Physical Education for Children (COPEC) published a position statement titled *Developmentally Appropriate Physical Education Practices for Children*. The National Association for Sport and Physical Education (NASPE) revised the document into separate appropriate instructional practices (AIP)

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documents for elementary (2004a), middle school (2004b), and high school (2004c) physical education (PE). NASPE further revised these documents for elementary (2009a), middle school (2009b), and high school (2009c). In addition to other purposes, these documents “address key aspects of instructional strategies and practices that are essential to delivery of quality physical education to adolescents and young adults” (NASPE, 2009c, p. 7). These documents also give

specific guidelines for recognizing and implementing developmentally appropriate physical education activities and practices . . . practices that are in the best interests of children (appropriate) and those that are counterproductive or even harmful (inappropriate) need to be identified for the benefit of the students. (NASPE, 2009c, p. 7)

With these purposes established, these documents serve as a tool “intended for policymakers, school administrators, and parents to provide specific guidelines . . . in the best interest of children” (NASPE, 2009a, p. 7).

Research on AIP in PE has been conducted among many different populations, for example, K–12 students (Barney & Christenson, 2014; Barney & Strand, 2008; Barney et al., 2013), parents (Barney & Pleban, 2010), school administrators (Barney & Prusak, 2016), physical education teacher education (PETE) majors (Barney et al., 2012), PE teachers (Strand & Bender, 2011), and college students not majoring in PETE (Strand et al., 2008). An analysis of the results from these populations revealed that these populations have repeatedly misidentified several instructional practices as AIP for PE. For example, parents feel the curriculum should consist of large groups (teams) in game activities usually with one ball between the two teams. Another example of an inappropriate instructional practice is having captains pick teams in front of the whole class. This activity has happened for many years, leaving students hurt and embarrassed, along with wasting valuable class time. Yet another example is the view that dodgeball is appropriate to play in PE class. This activity has been glamorized in movies (Cooper et al., 2007) and print media (Reilly, 2001). The activity of dodgeball is typically enjoyed by males and disliked by females (Barney & Prusak, 2021).

The AIP documents include specific examples of appropriate and inappropriate instructional practices in PE. Research has identified two specific inappropriate instructional practices commonly implemented in PE classes. Two studies illustrate the impact of these instructional practices on attitudes toward PE class and lifelong physical activity.

The first inappropriate instructional practice centers on students picking teams in front of the whole class. Barney, Prusak, et al. (2016) surveyed junior high school male students in PE class about picking teams. Students participated in two curriculum units (flag football and soccer). For these units, captains picked in front of the whole class or the PE teachers and captains picked teams in a private draft. The researchers asked the PE teacher to have captains pick teams in front of the whole class for one unit and to have a private meeting for the teacher and captains to select teams for the other unit. The data showed that the students did not express strong opinions or feelings about captains picking teams in front of their class or in a private draft. These results surprised the researchers, prompting a second study. The next study included units in basketball and volleyball and used the same methodology. Once again, the results were very similar to the data from the flag football and soccer unit. The researchers randomly interviewed the junior high school students to gain further insight. The results from the interviews painted a different picture. Students who were picked last or toward the end knew they would be picked last or toward the end and did not like how it felt to be picked last. The students who were captains and the students who were picked first expressed empathy for the students picked toward the end. They stated that they felt “bad” for their classmates and that they “wouldn’t be thrilled” if picked last.

A second study on instructional strategy looked at exercise as punishment (EAP) in PE class. Barney, Pleban, et al. (2016) interviewed college-aged students regarding their thoughts and experiences of EAP during their time in K–12 PE. The study generally found that the college students did not enjoy EAP while in K–12 PE. When the college students were asked how experiencing EAP made them feel, they said “it was humiliating,” “it changes the mood [of the class],” and “embarrassed when I had to run in front of my classmates.” The college students were asked if EAP would have any effect

on their future physical activity. One student stated, “Why choose to do something that you’ve learned is a punishment.”

Many of these AIP studies have helped create a baseline of information that helps PETE faculty better understand different populations and knowledge regarding instructional practices in PE. This information has been beneficial to K–12 PE teachers and PETE faculty in preparing their students. Although many AIP studies have been conducted, there is a paucity of qualitative results. This presents an opportunity for an addition to the AIP literature. Thus, the purpose of this study was to better understand middle school (MS) students’ perceptions of and attitudes toward AIP in their PE classes.

Method

Participants

This study included 25 students (eight males, 17 females; 12 sixth graders, eight seventh graders, five eighth graders) from the southeastern United States. Approval was obtained from the university institutional review board (IRB). The school district IRB gave approval, and we contacted the PE teachers at the MS and explained the study, which included student interviews. The four PE teachers (two males, two females) subsequently agreed to the study.

Procedures

Over a 3-day period, we interviewed students, with parental consent, regarding their perceptions of and attitudes toward AIP in their PE classes. Each interview took approximately 20 min and was audio recorded. All the students were asked the same questions during their interview. The interviews took place in an empty classroom in the gymnasium. At the conclusion of the interview, the student returned to their PE class and activities.

Interview Questions

The interview questions formulated for this study came from the results of the Barney et al. (2013) study. The students in that study felt the following instructional practices were appropriate: (a) teachers organizing activities involving large groups or teams with one ball for the activity, (b) dodgeball, (c) captains picking teams in front

of the whole class, (d) students being graded on wearing prescribed clothing, and (e) students being given outside-of-class assignments (homework) to apply what was taught in PE class.

Data Analysis

Participant responses were analyzed for each interview question and reviewed. The analysis generated preliminary coding categories, with framework analysis methodology for participant responses, as outlined by Check and Schutt (2011). Framework analysis incorporated the stages of (1) familiarization, (2) thematic, (3) identification, and (4) charting and interpretation (Rabiee, 2004). We used established categories from Barney et al. (2013) to sort the data. These categories included (a) students' participation in large groups or teams with one ball, (b) dodgeball, (c) students being graded on wearing prescribed clothing as part of their grade, (d), out-of-class assignments (homework) is appropriate for PE class, and (e) captains picking teams in front of the whole class (Table 1).

Results

Student Participation in Large Groups or Teams

Student comments regarding their participation in large groups or teams dealt with students not participating, which led to students goofing off. During interviews, students who were more skilled did not like or were frustrated when they participated in activities in large groups and teams with one ball. Fran said,

Because we play with one ball, students will not pass the ball to everyone. I hate that. I want to play, but no one will throw the ball. Because of this there is lots of arguing, which is just a waste of time.

Malcolm said,

When we play with large teams, the best players will hog the ball and will be playing the hardest. Those that are not playing are standing around and talking. I guess as they are standing around they can watch the others play and learn.

Table 1*List of Appropriate Instructional Practices Categories and Student Interview Themes*

AIP categories	Themes
Student participation in large groups or teams	<ul style="list-style-type: none">• Students goofing off• Not enough interaction with the ball
Dodgeball	<ul style="list-style-type: none">• Students like playing dodgeball• It is fun
Wearing prescribed clothing	<ul style="list-style-type: none">• Wearing the [school] shirt aids in getting an easy “A”
Out-of-class assignments (homework)	<ul style="list-style-type: none">• Homework in PE? No way.• Students wouldn’t do it (homework)

Steve stated, “I don’t like playing on large teams. I can’t play as well, and I can’t shoot the ball as much. I get mad at those standing around, because they get in the way.” Finally, Lindsey stated,

It can be rough. Everybody is going for the one ball. Some of the players are standing off to the side. The athletic ones are playing. The ones standing off to the side have their phones out. If the ball comes to them, they throw the ball away. It is a big pain.

Dodgeball

The second category dealt with dodgeball being played in PE class. The theme from this category was both male and female students liked playing dodgeball in class. A majority of students believed that dodgeball is an appropriate activity. Many of the student comments dealt with having fun while they played dodgeball. John said,

I played dodgeball in elementary school and now in middle school we have played it. It is so much fun to play. I am a baseball player, and I can throw the ball pretty good [the

student had a big grin on his face as he made this statement]. When I hit someone, I don't think it hurts because the ball is squishy.

Kelsey stated, "Dodgeball is so fun! It is fun throwing at people. It is also fun trying not getting hit by the ball." We asked Kelsey how other students might feel when they are hit by the ball. She said, "It is probably a bummer. Maybe they are saying, 'Dang!' After they get hit they probably want to get back in the game. I do!"

Wearing Prescribed Clothing for a Grade

The third category looked at wearing specific clothing (school shirt) for a student's grade. The theme from this interview question was this method of grading is a main part of getting a good grade. Stephanie stated, "It's an easy 'A'. All you have to do is wear the [school] T-shirt and you will get a good grade. I don't think that is the best way to be graded in PE." We asked Stephanie what she thought she should be graded on. She answered, "What we do in class. If we play the games and do our warm-ups." Gus said,

I don't want to lose points for not wearing my [school] shirt. I guess it is OK. There really isn't much to grade in PE. So, they need to grade something. If that is what they want to grade on, I am okay with it.

Along with Stephanie and Gus, many of the other students who were interviewed voiced the same opinion that wearing the school shirt would help them get an easy "A." The other opinion was they did not want to lose points because they did not wear the school shirt.

Out-of-Class Assignment

The fourth category concerned out-of-class assignments in PE. The general theme for this category was "Homework in PE? No way!" Not one student liked the idea. They thought having homework was unnecessary. For example, Jodie said, "I think it is unnecessary. I would not do it. Besides, I play on the volleyball and softball teams, so that is my homework for PE." Teresa stated, "It would frustrate me. I already have other school stuff to do. And plus, PE is a class to have fun. Having to do homework would take the fun out of PE

class. That is just dumb.” Janet’s comment summarizes the students’ feelings about out-of-class assignments in PE:

I am not sure it is a good idea. I do know that if we had out-of-class assignments in PE, not many people would do them. They would need to be recorded to prove to Coach Smith [pseudonym] we did it, to get the points.

Captains Picking Teams in Front of the Whole Class

The fifth and final category was captains picking teams in front of the whole class. Two themes came from the interviews. The first was picking teams is a common instructional practice and students are used to it. The second theme was students want to be picked by their friends or to pick their friends to be on their team. For the first theme, Paul stated, “When I am captain, I hurry and pick my team because I want to get playing.” We then asked Paul how picking teams in front of the whole class made others feel. Paul said, “I think they are okay with it. Every time we play basketball and soccer, we pick teams. We do it all the time.” John said, “Picking teams is okay. Everyone thinks it is fair. The only people that are not happy are those girls that are not on the same team with their friends.” Kim said, “When we pick teams, I don’t like it, because it isn’t fair.” Kim’s statement alludes to picking teams being a common instructional practice. The second theme was being picked by their friends or picking their friends. Lindsey said,

When I am captain, I always pick my friends to be on my team. It makes the game so much funnier. Last year when I was captain, one of my friends was picked by another girl. My friend was so mad at me. So after that I would pick her first.

Brent stated,

I try to pick my friends, but they are pretty good [players], so they get picked first. The girls get all upset if they don’t pick their friends. One time after their teams were picked, they were trying to trade some other girls so they could have their friends with them.

Interestingly, not all students felt picking teams was a good instructional practice. A few of the students commented that when teams were picked, students were “hurt,” “embarrassed,” or “had a sad look on their face,” and they said “it would be a bummer.”

Discussion

The purpose of this study was to better understand MS students’ perceptions of and attitudes toward AIP in their PE classes. The qualitative results from this study came from five categories from previous research (Barney et al., 2013). From these categories, four themes emerged from the MS student responses during the interviews: (1) students like dodgeball in PE class, (2) wearing prescribed clothing is an easy “A” in PE class, (3) out-of-class assignments are not good for PE, and (4) picking teams in front of the class is a normal practice in PE class.

The theme of the appropriateness of playing dodgeball does not come as a surprise. Dodgeball has been played in PE class, and other settings, for many years (Barney & Pleban, 2010). Dodgeball, for some people, is a rite of passage in a becoming young man or young woman (Reilly, 2001). Dodgeball has been promoted to improve a students’ ability to jump, to improve their ability to avoid getting hit by the ball, to improve a their throwing ability, and to give them courage during the game (Barney & Prusak, 2021). From this study, many of the students stated the game was “fun,” “exciting,” and “awesome.” Yet NASPE (2006) came out with a position statement regarding dodgeball, stating that “dodgeball is not an appropriate activity for K–12 school physical education programs” (p. 1). The document continues, stating that dodgeball does not build confidence in students; targets weaker students; and uses inappropriate phrases such as “throw-to-kill,” “headshots,” and “annihilate.” While this statement does not endorse dodgeball as an AIP, students indicated otherwise with statements such as “Dodgeball is fun. It is fun throwing at people” and “Dodgeball is a good competitive game, and I am competitive, I want to win.” This mindset of dodgeball being appropriate will continue until PE teachers, parents, and school administrators act otherwise.

Students indicated that wearing prescribed clothing is a way to get an easy “A” in PE class. Student comments centered on wearing the prescribed school shirt to receive the “A” grade. One student

stated, “If you don’t wear the right shirt at all, you could get a bad grade for the class.” Another student said, “Wearing the [school] shirt is an easy way to get a good grade in PE. The ‘A’ I get in PE is great for my GPA.” Here again, students felt that wearing prescribed clothing is an appropriate practice in their PE classes. Yet Miller (2002) stated that basing grades on dress, attendance, and effort undermines PE class. While dress, attendance, and effort are relevant assessments of students’ affective skills related to PE, PE teachers should explore a variety of alternative assessment techniques to analyze students’ understanding and the teacher’s effectiveness. It is also possible that students understand that dress, attendance, and effort are not appropriate and meaningful measures in the psychomotor and cognitive domain and default them to the affective domain. But that would mean they have an incomplete understanding of how the social/affective domain contributes to learning in PE (Barney & Strand, 2006). This instructional practice does not have the potential to negatively affect student attitudes toward PE or physical activity throughout their life. Yet the message sent to students is that wearing prescribed clothing and showing up to class guarantees an “A” grade. The message being sent to students, parents, and school administrators is that PE is not important for student learning and that it is glorified recess. Here again, PE teachers need to change this instructional practice, which, in turn, may change others’ perceptions and mindsets regarding PE.

Another theme dealt with out-of-class assignments (homework) and them being unnecessary for PE class. When asked during the interviews about out-of-class assignments, many students laughed at the idea of having homework in PE class. Not one student felt out-of-class assignments could be a part of PE class. One student openly and honestly stated, “I would never do homework for PE.” Out-of-class assignments give students opportunities to apply the information taught in class. Mitchell et al. (2000) studied attitudes of high school students toward out-of-class assignments in PE. Generally, the students in this study vocalized the importance of out-of-class assignments. Yet the physical educators in this study felt the students were not giving their best efforts to complete given assignments. The results from this study illustrate that students do not take out-of-class assignments seriously. Here again, physical

educators need to hold students responsible regarding out-of-class assignments. This instructional practice can greatly affect a student's experience in their PE class. When students are given out-of-class assignments and successfully accomplish them, their skills can improve, resulting in greater confidence in participating in the given game or activity.

Finally, many of the students in this study felt that picking teams in front of the whole class is a common (and largely appropriate) instructional practice for PE class. This practice of picking teams in front of the whole class usually occurred when the class played basketball and soccer. According to one student, "Every time we play basketball and soccer, we pick teams." We felt from this statement, this practice is a commonplace occurrence or a routine established with the students. Another point from this category was that the students want to be picked by their friends and be on the same team. Student responses to this interview question were "I want to be picked by my friends" and "I like it better when I am on the same team as my friends." These types of responses are similar to what Barney, Prusak, et al. (2016) learned from their study of junior high school males' experiences when teams are picked by captains. In follow-up interviews, students stated that in many cases captains pick their friends. Although these two themes were repeated during the interviews, picking teams with captains in front of the whole class was not liked by everyone. One student, who was a captain, said, "I bet students that are picked last probably feel bad." Another student stated, "I don't like to be captain, because I have to pick the last [student] to be on my team. I don't like the look on their faces." Once again, these students' statements are similar to findings from Barney, Prusak, et al. (2016). From their study, students stated that being picked last "can be [a big deal] because it excludes people." Other comments were "It is not fun being picked last" and "Being picked last means you don't have any friends." This instructional practice can be completely eliminated if the PE teacher thinks through and creates teams before game play starts in PE class.

Study Limitations

This study had two primary limitations. Participants come from one middle school in the southeastern United States. Research involving additional MS students may ascertain the pervasiveness

of these practices. Another limitation is the number of categories, which narrowed what was studied. Many other instructional practices related to AIP could be investigated.

Conclusion

The purpose of this study was to better understand MS students' perceptions of and attitudes toward AIP in their PE classes. Interviews conducted with MS students in this study once again reaffirm the importance of MS physical educators, and all K–12 physical educators, implementing AIP in their lessons and activities. The results from this study reveal that instructional practices such as captains picking teams in front of the whole class, being graded on wearing prescribed clothing, and playing dodgeball are still occurring in MS PE classes. Physical educators need to evaluate their instructional practices and make adjustments if these inappropriate practices are taking place in their classes. These instructional practices may negatively affect student attitudes toward their PE classes and eventually negatively impact a student's lifelong physical activity. Luckily, the students who were interviewed in this study did not have negative attitudes toward their PE experiences. During the interviews, we asked the students what they like about their PE class. Students said they like the games and activities they participate in, their PE teachers, and the opportunity to be with friends and make friends. It is hoped through continued exposure to AIP in PE, MS students will have positive attitudes toward PE and a desire to be physically active throughout their lifetime (Committee on Prevention of Obesity in Children and Youth, 2005; Jain, 2004).

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