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## 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 many inappropriate instructional practices in physical education (PE). Involvement in, and exposure to these inappropriate instructional practices become common occurrences, 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 and attitudes of appropriate instructional practices (AIP) in their PE classes. It was generally found from interviews that students perceived dodge ball 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 all as appropriate practices for PE class.

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## Introduction

In 1992, the Council of 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 three separate documents for elementary (2004a), middle school (2004b), and high school (2004c) physical education (PE). More recently, NASPE revised the Appropriate Instructional Practices (AIP) 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, 2000c). Another purpose for these documents is to 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” (2009a, p.7).

The area of AIP in PE , research has been conducted among many different populations. For example, K-12 students (Barney & Christenson, 2014; Barney, Strand, & Prusak, 2013 & Barney & Strand, 2008), parents (Barney & Pleban, 2010), school administrators (Barney & Prusak, 2016), Physical Education Teachers Education (PETE) Majors (Barney, Christenson, & Pleban, 2012), PE teachers (Strand & Bender, 2011), and regular college students (Strand, Barney, & DeFries, 2008), have been studied to ascertain their knowledge of AIP in PE. After

47 analyzing the results from these populations there are several instructional practices that these  
48 populations have repeatedly misidentified as appropriate instructional practices for PE. For  
49 example, parents feel the curriculum should consist of large groups (teams) in game activities  
50 usually with one ball between the two teams. Another example of an inappropriate instructional  
51 practice is having captains pick teams in front of the whole class. This activity has happened for  
52 many years, leaving students hurt and embarrassed, along with wasting valuable class time. Yet,  
53 another example is the view that dodgeball is appropriate to play in PE class. This activity has  
54 been glamorized in movies (Cooper, Dobkins, & Gillespie, 2007) and print media (Reilly, 2001).  
55 The activity of dodgeball is typically enjoyed by males and disliked by females (Barney &  
56 Prusak, in press).

57         The AIP documents includes specific examples of appropriate and inappropriate  
58 instructional practices in PE. Research has identified two additional, specific inappropriate  
59 instructional practices that are commonly implemented in PE classes. The first, centers around  
60 students picking teams in front of the whole class. Barney, Prusak, Beddoes, & Eggett (2016)  
61 surveyed junior high school male students in PE class about picking teams. Students participated  
62 in two curriculum units (flag football and soccer). For these two units' students were picked by  
63 captains in front of their whole class or the teams were picked in a private draft with the PE  
64 teachers and captains. The researchers asked the PE teacher to have a captains pick teams for  
65 one unit and for the other unit, there would be the private meeting to select teams. After  
66 analyzing the data, the students did not express strong opinions or feelings about captains  
67 picking teams in front of their class or having a private draft. These results surprised the  
68 researchers, prompting a second study. The next study included units in basketball and  
69 volleyball and used the same methodology. Once again, the results were very similar to the data

## MS Students Perceptions of AIP in PE

70 from the flag football and soccer unit. The researchers decided to randomly interview the junior  
71 high school students to gain further insight. The results from the interviews painted a different  
72 picture. Students that were picked last or towards the end knew they would be picked last or  
73 towards the end and did not like how it felt to be picked last. The students that were captains and  
74 students who were picked first expressed empathy for those students picked towards the end.  
75 They stated that they felt “bad” for their classmates, and that they “wouldn’t be thrilled” if they  
76 were picked last.

77 A second study instructional strategy looked specifically at exercise as punishment (EAP)  
78 in PE class. Barney, Fullmer, Higginson, Griffiths, & Whaley (2016) interviewed college-aged  
79 students regarding their thoughts and experiences of EAP during their time in K-12 PE. It was  
80 generally found that the college students in this study did not enjoy EAP while they were in K-12  
81 PE. When the college students were asked how it made them feel when they experienced EAP,  
82 they said “it was humiliating”, “it changes the mood [of the class]”, and “embarrassed” when I  
83 had to run in front of my classmates. The college students were asked if EAP would have any  
84 effect on their future physical activity (PA). One student stated, “Why choose to do something  
85 that you’ve learned is a punishment.” These two studies illustrate the impact these instructional  
86 practices can have on attitudes towards PE class and lifelong PA.

87 Many of these AIP studies have helped create a baseline of information helping PETE  
88 faculty better understand different populations and knowledge regarding instructional practices  
89 in PE. This information has been beneficial to current K-12 PE teachers and PETE faculty in  
90 preparations of their students. Although the many AIP studies that have been conducted, there is  
91 a paucity of qualitative results. This presents an opportunity to add to the AIP literature. Thus,

92 the purpose of this study was to better understand middle school (MS) students' perceptions and  
93 attitudes towards AIP in their PE classes.

## 94 **Methods**

### 95 **Participants**

96 This study included 25 students (eight males and 17 females; 12 6<sup>th</sup> graders, eight 7<sup>th</sup>  
97 graders and five 8<sup>th</sup> graders) from the southeastern region of the United States. Approval was  
98 obtained from the university institutional review board (IRB). The school district IRB gave  
99 approval, the researcher contacted the PE teachers at the MS to explain the study, which included  
100 student interviews. The four PE teachers (two males and two females) subsequently agreed to  
101 the study, as well.

### 102 **Procedures**

103 Over a three-day period, the researcher interviewed students, with parental consent,  
104 regarding their perceptions and attitudes regarding AIP in their PE classes. Each interview took  
105 approximately 20 minutes and were audio recorded. All the students were asked the same  
106 questions during their interview. The interviews took place in an empty classroom in the  
107 gymnasium. At the conclusion of the interview the student would return to their PE class and  
108 activities.

### 109 **Interview Questions**

110 The interview questions that were formulated for this study came from the results of the  
111 Barney, Strand, and Prusak (2013) study. The results of the study found that students felt the  
112 following instructional practices were appropriate: a) teachers organizing activities involving  
113 large groups or teams with one ball for the activity, b) dodgeball, c) having captains pick teams  
114 in front of the whole class, and d) students' should be graded on wearing prescribed clothing and

115 e) students should be given outside-of-class assignments (homework) to apply what was  
116 taught in PE class.

### 117 **Data Analysis**

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

## 127 **Results**

### 128 **Student Participation in Large Groups or Teams**

129 Student comments regarding their participation in large groups or teams dealt with a lack  
130 of students not participating, leading to students goofing off. During interviews students that  
131 were more skilled didn't like or were frustrated when they participated in activities in large  
132 groups and teams with one ball. Fran said,

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

136 Malcolm said,

137 "When we play with large teams the best players will hog the ball and will be playing the

138           hardest. Those that are not playing are standing around and talking. I guess as they are  
139           standing around they can watch the others play and learn.”

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

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

#### 146 **Dodgeball**

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

151           “I played dodgeball in elementary school and now in middle school we have played it. It  
152           is so much fun to play. I am a baseball player, and I can throw the ball pretty good (the  
153           student had a big grin on his face as he made this statement). When I hit someone, I  
154           don’t think it hurts because the ball is squishy.”

155 Kelsey stated, “Dodgeball is so fun! It is fun throwing at people. It is also fun trying not getting  
156 hit by the ball.” The researcher asked Kelsey how other students might feel when they were hit  
157 by the ball. She said, “It is probably a bummer. Maybe they are saying, “Dang! After they get  
158 hit they probably want to get back in the game. I do!”

#### 159 **Wearing Prescribed Clothing for a Grade**



160           The third category looked at wearing specific clothing (school shirt) for a student’s grade.  
161   The theme from this interview question was that this method of grading was easily a main part of  
162   getting a good grade. Stephanie stated, “It’s an easy ‘A’. All you have to do is wear the [school]  
163   t-shirt and you will get a good grade. I don’t think that is the best way to be graded in PE.” The  
164   researcher asked Stephanie what she thought she should be graded on. She felt that a student be  
165   graded on “what we do in class. If we play the games and do our warm-ups.” Gus said,  
166           “I don’t want to lose points for not wearing my [school] shirt. I guess it is OK. There  
167           really isn’t much to grade in PE. So, they need to grade something. If that is what they  
168           want to grade on I am okay with it.”

169   Along with comments Stephanie and Gus made, many of the other students that were  
170   interviewed voiced the same opinions of wearing the [school] shirt would help get and “easy  
171   ‘A’.” The other opinion was that they did not want to lose points because they did not wear the  
172   [school] shirt.

### 173   **Out of Class Assignment**

174           The fourth category had to do with out-of-class assignments in PE. The general theme  
175   for this category received a universal reaction of “Homework in PE? No way!” Not one student  
176   said they liked the idea, or they thought having homework was unnecessary. For example, Jodie  
177   said, “I think it is unnecessary. I would not do it. Besides I play on the volleyball and softball  
178   teams, so that is my homework for PE.” Teresa stated, “It would frustrate me. I already have  
179   other school stuff to do. And plus, PE is a class to have fun. Having to do homework would  
180   take the fun out of PE class. That is just dumb.” Janet summarized student feelings about out-  
181   of-class assignments in PE when she said,  
182           “I am not sure it is a good idea. I do know that if we had out-of-class assignments in PE,

183 not many people would do them. They would need to be recorded to prove the Coach  
184 Smith (pseudonym) we did it to get the points.”

### 185 **Captains Picking Teams in Front of the Whole Class**

186 The fifth and final category was captains picking teams in front of the whole class. The  
187 two themes that came from the interviews. The first was that picking teams was a common  
188 instructional practice and students were used to it. The second theme was they wanted to be  
189 picked by their friends or pick their friends to be on their team. For the first theme, Paul stated,  
190 “When I am captain I hurry and pick my team, because I want to get playing.” The researcher  
191 then asked Paul how picking teams in front of the whole class made others feel. Paul said,” I  
192 think they are okay with it. Every time we play basketball and soccer, we pick teams. We do it  
193 all the time.” John said, “Picking teams is okay. Everyone thinks it is fair. The only people that  
194 are not happy are those girls that are not on the same team with their friends.” Kim said, “When  
195 we pick teams, I don’t like it, because it isn’t fair.” Kim’s statement alludes to the fact that  
196 picking teams is a common instructional practice. The second theme that was common among  
197 the participants was being picked by their friends or picking their friends. Lindsey said,  
198 “When I am captain, I always pick my friends to be on my team. It makes the game so  
199 much funnier. Last year when I was captain, one of my friends was picked by another  
200 girl. My friend was so mad at me. So after that I would pick her first.”

201 Brent stated,

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

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

## 208 **Discussion**

209 The purpose of this study was to better understand MS students’ perceptions and attitudes  
210 towards AIP in their PE classes. The qualitative results from this study came from five  
211 categories from previous research (Barney, Strand, & Prusak, 2013). From these categories there  
212 came four themes from the MS student responses during the interviews. They were: 1) students  
213 like dodgeball in PE class, 2) wearing prescribed clothing is an easy ‘A’ in PE class, 3) out-of-  
214 class assignments are not good for PE and 4) picking teams in front of the class is a normal  
215 practice in PE class.

216 The theme of the appropriateness of playing dodgeball does not come as a surprise.  
217 Dodgeball has been played in PE class, and other settings, for many years (Barney & Pleban,  
218 2010). Dodgeball, for some people is a rite of passage in a becoming young man or young  
219 women (Reilly, 2001). Dodgeball has been promoted to improve a students’ ability to jump, to  
220 avoid getting hit by the ball, improve a students’ throwing ability and to be courageous during  
221 the game (Barney & Prusak, in press). From this study many of the students stated the game was  
222 “fun”, “exciting”, and “awesome.” Yet, NASPE, has come out with a position statement  
223 regarding dodgeball. It states, “dodgeball is not an appropriate activity for K-12 school physical  
224 education programs” (NASPE, 2006). The document continues to state that dodge ball doesn’t  
225 build confidence in students, weaker students are targeted, phrases like “throw-to-kill”,  
226 “headshots” and “annihilate” are used, which are not appropriate. With this statement not  
227 endorsing dodgeball as an appropriate instructional practice, students indicated otherwise with

228 such statements like “Dodgeball is fun. It is fun throwing at people” and “Dodgeball is a good  
229 competitive game, and I am competitive, I want to win.” This mindset of dodgeball being  
230 appropriate will continue until PE teachers, parents and school administrators act otherwise.

231         Students indicated that wearing prescribed clothing was a procedure to help get an easy  
232 ‘A’ in PE class. Student comments were centered around wearing the prescribed [school] shirt to  
233 receive the ‘A’ grade. One student stated, “If you don’t wear the right shirt at all you could get a  
234 bad grade for the class.” Another student said, “Wearing the [school] shirt is an easy way to get  
235 a good grade in PE. The ‘A’ I get in PE is great for my GPA.” Here again, students felt that  
236 wearing prescribed clothing was an appropriate practice for them in their PE class. Yet, Miller  
237 (2002) stated that basing grades on dress, attendance and effort undermine PE class. Dress,  
238 attendance and effort are relevant assessments of students’ affective skills related to physical  
239 education. Rather, PE teachers should explore a variety of alternative assessment techniques to  
240 analyze students’ understanding and the teachers’ effectiveness. It’s also possible that students  
241 understand that dress, attendance and effort are not appropriate and meaningful measures in the  
242 psychomotor and cognitive domain and defaulted them to the affective domain. But that would  
243 mean they have an incomplete understanding of how the social/affective domain contributes to  
244 learning in PE (Barney & Strand, 2006). This instructional practice does not have the potential  
245 to negatively affect student attitudes towards PE or physical activity (PA) throughout their life.  
246 Yet, the message is sent to students, that wearing prescribed clothing and showing up to class  
247 will guarantee an “A’ grade. The message being sent to students, parents, and school  
248 administrators is that PE is not important for student learning and that it is glorified recess. Here  
249 again, PE teachers need to change this instructional practice, which in turn, may start to change a  
250 person’s perception and mindset regarding PE.

251 Another theme dealt with out-of-class assignments (homework) and finding them  
252 unnecessary for PE class. When students were asked during the interviews about out-of-class  
253 assignments many of them laughed at the idea of having ‘homework’ in PE class. Not one  
254 student felt out-of-class assignments could even be a part of PE class. One student openly and  
255 honestly stated, “I would never do homework for PE.” Out-of-class assignments give students  
256 opportunities to apply what they were taught in class. Mitchell, Stanne and Barton (2000)  
257 studied attitudes of high school students towards out-of-class assignments in PE. Generally, the  
258 students in this study vocalized the importance of out-of-class assignments for them. Yet, the  
259 physical educators in this study felt the students were not giving their best efforts to complete  
260 given assignment. The results from this study illustrates that students do not take out-of-class  
261 assignments seriously. Here again, physical educators need to hold students responsible  
262 regarding out-of-class assignments. This instructional practice can greatly affect a student’s  
263 experience in their PE class. As students are given out-of-class assignments and are successfully  
264 accomplished, skills can improve, resulting in greater confidence in participating in the given  
265 game or activity.

266 Finally, many of the students in this study felt that picking teams in front of the whole  
267 class was a common (and largely appropriate) instructional practice for PE class. This practice  
268 of picking teams in front of the whole class usually occurred when the class played basketball  
269 and soccer, as stated by a student when he stated, “every time we play basketball and soccer, we  
270 pick teams.” The researcher felt from this statement, this practice was a common place  
271 occurrence, or a routine established with the students. Another point from this category was that  
272 the students wanted to be picked by their friends and be on the same team. Student responses to  
273 this interview question were, “I want to be picked by my friends’, and “I like it better when I am

274 on the same team as my friends.” These types of responses are similar to what Barney, Prusak,  
275 Beddoes, and Eggett (2016) learned from their study, investigated junior high school boy’s  
276 experiences when teams are picked by captains. In follow-up interviews students stated that in  
277 many cases captains will pick their friends. With these two themes being repeated during the  
278 interviews, there were still statements made that picking teams with captains in front of the  
279 whole class was not liked by everyone. One student that was a captain said, “I bet students that  
280 are picked last probably feel bad.” Another student stated, “I don’t like to be captain, because I  
281 have to pick the last one [student] to be on my team. I don’t like the look on their faces.” Once  
282 again, these students’ statements are similar to findings from Barney, Prusak, Beddoes, and  
283 Eggett (2016). From their study, students stated, “that being picked last “can be [a big deal]  
284 because it excludes people.” Other comments were, “It is not fun being picked last”, and “Being  
285 picked last means you don’t have any friends.” This instructional practice can be completely  
286 eliminated by the PE teacher by taking time to thoughtfully thinking through and creating teams  
287 before game play starts in PE class.

### 288 **Conclusions**

289 The purpose of this study was to better understand MS students’ perceptions and attitudes  
290 towards AIP in their PE classes. Interviews conducted with MS students in this study once again  
291 reaffirms the importance of MS physical educators, and all K-12 physical educators, to  
292 implement AIP in their lessons and activities. The results from this study reveal that such  
293 instructional practices such as captains picking teams in front of the whole class, being graded on  
294 wearing prescribed clothing, and the playing of dodgeball are still taking place in MS PE classes.  
295 Physical educators need to evaluate their instructional practices and make adjustments if they are  
296 taking place in their classes. These instructional practices have the potential to negatively affect

297 student attitudes towards their PE classes and eventually have a negative impact in a students  
298 lifelong PA. Luckily, these students in this study that were interviewed did not have negative  
299 attitudes towards their PE experiences. During the interviews the researcher asked the students  
300 what they like about their PE class. Students responded by saying they liked the games and  
301 activities they participate in, their PE teachers, and the opportunity to be with friends and make  
302 friends. It is hoped through continued exposure to AIP in PE, MS students will have positive  
303 attitudes and a desire to be physically active throughout their lifetime. This being one method in  
304 helping to combat obesity (Committee of Prevention of Obesity in Children and Youth, 2005;  
305 Jain, 2004).

### 306 **Study Limitations**

307 Two primary limitations are noted for this study. Participants came from one middle  
308 school either in the region or across the nation or world. Research involving additional MS  
309 students is needed to ascertain the pervasiveness of these practices. Another limitation is the  
310 categories used narrowed what was studied: many other instructional practices could be  
311 investigated that related to AIP.

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391 **Table 1**

392 List of Appropriate Instructional Practices (AIP) Categories and Student Interview Themes

393

394

395 AIP Categories

Themes

396

397

398 Student Participation in Large  
399 Groups or Teams

\* Students Goofing off  
\* Not enough Interaction with the Ball

400

401

402 Dodge Ball

\* Student like playing Dodge Ball  
\*It is fun

403

404

405

406 Wearing Prescribed Clothing

\* Wearing the [school] shirt aids in getting an  
easy 'A'

407

408

409

410 Out-of-class Assignments (homework)

\* Homework in PE? No way.  
\*Students wouldn't do it (homework)

411

412

413