

METHODOLOGY

Picking Teams: Motivational Effects of Team Selection Strategies in Physical Education

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Abstract

The tacitly sanctioned practice of publicly picking teams in physical education has been categorized as instructionally inappropriate, yet its practice persists. Therefore, the purpose of this two-study article was to examine its effects on achievement goals orientations and motivational profiles of male junior high school physical education students ($n = 233$). Students were assigned to one of two conditions (publicly picked teams or confidential draft) in four sports and across four trials. Unexpectedly, findings revealed no significant differences between groups across sports or within trials in (a) goals orientation or (b) self-determined motivation. However, follow-up interviews revealed insights into (a) selection motives, (b) differentiation in conceptions of abilities, and (c) a sense of empathy for peers vulnerable to the practice. Despite nonsignificant findings in survey results, the qualitative data revealed nuances associated with this practice that have allowed us to make specific recommendations against the continued use of this practice.

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In 2009, the National Association for Sport and Physical Education (NASPE) published three documents containing some 206 items describing appropriate instructional practices in physical education (AIP-PE). AIP guidelines for elementary ($n = 70$; NASPE, 2009a), middle school ($n = 68$; NASPE, 2009c), and high school ($n = 68$; NASPE, 2009b) constitute a consensus statement intended to inform not only PE teachers and students, but also parents and guardians, school administrators, and policy makers.

The intent of the AIP-PE documents is to ensure that physical education instruction incorporates “the best-known practices derived from both research and teaching experiences, into a pattern . . . that maximizes opportunities for learning and success for all students” (NASPE, 2009c, p. 3). To that end, each document identifies several appropriate and, conversely, inappropriate practices under the categories of learning environment, instruction, curriculum, assessment, and professionalism. Most noteworthy are guidelines that address issues such as dealing with bullying; using exercise as punishment; inclusion; picking of teams; modified games; appropriate focus on competition; and knowledge, skill, and fitness assessment.

In a series of studies to assess the degree to which AIP-PE is understood, accepted, and implemented, Barney and his colleagues polled K–12 students (Barney & Christenson, 2014; Barney, Christenson, & Pleban, 2012), physical education teacher education (PETE) majors (Barney & Christenson, 2013; Barney et al., 2012), administrators (Barney & Prusak, 2014), and parents (Barney & Pleban, 2010). Generally, each group was able to identify each practice correctly as appropriate or inappropriate. However, as a whole, these studies reveal a concerning pattern of mislabeling certain practices. Specifically, eight items were generally mislabeled. Seven *inappropriate* practices mislabeled as appropriate included use of large group activities and competition to identify winners and losers; public picking of captains and teams; fitness testing for public recognition and rewards; use of militaristic calisthenics for fitness purposes; inclusion of dodgeball; skill assessment in nonauthentic or contrived settings; and grading student attitudes based on attendance, wearing gym clothes, and effort (Barney & Christenson, 2013, 2014; Barney et al., 2012; Barney & Pleban, 2010; Barney & Prusak, 2014; Barney & Strand, 2008). One *appropriate* practice was mislabeled as inap-

propriate: required outside-of-class homework and assignments (Barney & Strand, 2008; Barney, Strand, & Prusak, 2013)

Some of these mislabeled practices are more consequential than others, particularly if they exert negative effects on student motivation. For example, the type and frequency of public recognition and rewards have been identified as particularly sensitive in the overtly peer-comparative public school environment. Furthermore, because society places high social value on athletic prowess, comparing favorably in athletic arenas (including physical education) presents a more highly charged potential for negative experiences in physical education. One such frequently misapplied practice that may have serious negative consequences is the public selection of team captains and team members. Indeed, in all five previous studies, a majority of elementary (54%), middle grade (68%), and high school (66%) students, in addition to PETE majors (57%) and parents (74%), apparently saw nothing inappropriate or wrong about this questionable and highly peer-comparative practice.

Motivational Effects of Misuse of AIP-PE

Achievement goal theory (AGT) has been used to examine the dispositional effects that students experience in a variety of achievement settings (Nicholls, 1981, 1984), including PE. AGT posits that the primary goal in any achievement setting (e.g., physical education) is to gain competence (a sense of “I can do this”). It further proposes that competence can be achieved by eliciting either an ego (success is peer-referenced) or a task (success is self-referenced) orientation within the student that matches the setting as constructed by the teacher. Ames and Archer (1988) examined the existence of behavioral strategies (Dweck & Leggett, 1988; Elliott & Dweck, 1988; Todorovich & Curtner-Smith, 2002) that students employ in pervasively ego- and task-oriented physical education classes to achieve a sense of competence. When students are placed within an ego-oriented environment focused on peer comparative activities (e.g., an inappropriately high emphasis on success in competition), they adopt a set of *maladaptive* learning behaviors and strategies including peer-referenced success, low effort, giving up easily, avoidance of optimally challenging tasks, deception and cheating, negative affect, and withdrawal following failure (Solmon, 1996). Conversely, students in a pervasively task-oriented climate employ a set of *adaptive*

learning behaviors and strategies including self-referenced success, increased effort, persistence, seeking optimally challenging tasks, focus on personal improvement, solving a problem, positive affect, and motivation to reengage—even after a lack of success (Solmon, 1996). Ultimately, research shows that students learn more in task climates and have positive attitudes toward the experience (Solmon, 1996). Student dispositions toward task or ego orientations are highly malleable and highly influenced by the nature of the achievement setting to which they are exposed. Essentially, students adopt an orientation that they perceive necessary to achieve a sense of competence based on their perceptions of the achievement setting. Last, task or ego orientations are posited to be orthogonal (Roberts, Treasure, & Kavussan, 1996), or operating independently within individuals. Thus, it is possible for a student to have a high task and a high ego orientation, low on both, or one high and the other low.

TARGET Structures in Physical Education

Ames (1995) employed the useful TARGET (Epstein, 1989) acronym to aid teachers in creating task climates with the intent of eliciting from the students a matching task orientation. Task, Authority, Rewards, Grouping, Evaluation (assessment), and Timing are described in terms of strategies that a teacher can employ to create a decidedly task climate in PE successfully. Of primacy in this study is *G*—grouping strategies—and particularly the practice of picking teams publicly. Grouping students refers to putting students with a partner, in a small group, or on a team for an activity. In 1996, this practice earned a spot in the Physical Education Hall of Shame and was labeled as “psychological warfare” and “torture” (Williams, 1996, p. 47). Indeed, in a recent study, Jensen, Cushing, and Elledge (2014) went as far as to characterize the practice as a form of bullying that may have lasting and detrimental effects on children’s motivation toward current and future physical activity patterns.

In addition to AGT, self-determination theory (SDT) of motivation has also provided a useful framework for examining motivational effects in physical education. SDT proposes that as the social needs of competence, autonomy, and relatedness are met, individuals experience increased self-determination as evidenced by positive changes in their behaviors, cognition, and affect. The theory further posits that a person’s motivational profile is oriented along

a continuum ranging from amotivation (lacking motivation to act) to extrinsic motivation (acting for reasons outside of self) to intrinsic motivation (acting for reasons that originate from within self). Last, SDT proposes an increasingly stable hierarchical relationship between three levels of generality, namely, situational (the here and now), contextual (domain specific, e.g., physical education), and global (life traits; Vallerand, 2001).

Combined in one examination, the constructs from AGT and SDT allow researchers to examine specific aspects of the learning environment and their motivational effects on students. Because of the shared construct of *competence*, it is possible to manipulate the learning environment—to be either task oriented or ego oriented—and then measure the motivational effects each setting exerts on the students.

Therefore, the purpose of this two-study article was to examine and report the effects of two grouping strategies (ego oriented: picking teams publicly vs. task oriented: confidential draft) on the situational motivation and the task/ego disposition of males in junior high school physical education across two studies and four sport activities. We hypothesized that the decidedly ego-oriented experience of publicly picking captains/teams would (a) elicit a significant shift toward student ego dispositions and (b) result in an overall decrease in situational motivation, and we did not anticipate (c) changes in contextual motivation.

Method

Overview

We conducted two consecutive studies to examine the hypothesized effects of the method of team selection on disposition (task and ego) and motivation (amotivation, external regulation, identified regulation, and intrinsic motivation) of junior high school males in physical education. We made the decision to conduct a second study to confirm or refute the unanticipated results from Study 1. Because of similar methodologies and findings, and particularly to avoid unnecessary repetition, we report both studies together, providing clarification where needed.

We conducted each of the following studies using an intervention in which students in intact classes were assigned to one of

two conditions (public picking of teams vs. confidential drafting of teams) across four sports (Study 1: flag football and soccer; Study 2: volleyball and basketball). Response variables assessed (a) situational motivation and (b) achievement goals orientation (task vs. ego) before and after each sport, in both conditions. For Study 1, we employed a quasi-experimental, 2 (conditions) \times 2 (sports: flag football and soccer) \times 4 (trials) between and within design with repeated measures analysis of variance (RM ANOVA). For Study 2, we used the same design with the exception of also including a crossover between sports (i.e., students in one condition in volleyball received the opposite condition in basketball). We likewise examined data from Study 2 using RM ANOVA to examine between and within differences. Additionally, we examined descriptive statistics and correlations among variables of interest. We conducted follow-up interviews with a purposeful sampling of students ($n = 14$) from Study 2, to assess possible long-term adverse effects (Jensen et al., 2014) from method of team selection experienced in physical education.

The purpose of these two studies was to examine the effects of two grouping strategies (picking teams publicly vs. confidential draft) on (a) the situational motivation and (b) the task/ego disposition of males in junior high school physical education. We hypothesized that the decidedly ego-oriented experience of publicly picking captains/teams would (a) elicit a significant shift toward student ego dispositions and (b) result in an overall decrease in situational motivation, and we did not anticipate (c) changes in contextual motivation.

Participants and Setting

One hundred seventeen (Study 1) and 116 (Study 2) male physical education students in Grades 7–9 participated in these studies. The physical education classes at this junior high were gender segregated, all male and all female. Students were enrolled in their physical education class for half of the school year. Participants were students from a junior high school of 1,264 (675 male, 589 female) serving seventh to ninth grade, in a predominantly middle class to middle upper class, primarily Caucasian (88% White, 7% Hispanic, 5% other) community located in the Intermountain West. Participants returned signed letters of informed consent/assent prior to both studies.

Procedures

Study procedures received university institutional review board and district approval. The practice of publicly picking teams was common on the playground or in pickup games, though not a universal occurrence in physical education. Both studies were conducted using a 2 (methods of team selection) \times 2 (sports) \times 4 (trials) between and within, quasi-experimental design (exception: in Study 2, a crossover design between sports was used). In each study, four intact classes were randomly assigned to one of two methods of team selection (publicly picked teams or confidential draft). In the publicly picked teams condition, captains (selected by the teacher based on athleticism and an outgoing nature or popularity) selected members for six teams in order (Teams 1 to 6) and then reversed order for each successive round. Team members in the draft condition were selected by teacher-chosen captains in a confidential draft (order Team 1 to Team 6 and then reversed the order). Then to ensure the fairest team selection, following the draft, captains were randomly assigned to one of the six teams. This method of choosing teams was explained to class members, and team rosters were posted in the gym the following day. The unit was 2 weeks in length.

In Study 1, students in both conditions participated first in a flag football unit and then in a soccer unit. In Study 2, students in both conditions participated in a volleyball unit, switched conditions, and then participated in a basketball unit. Under the direction of the teacher, participants completed the Perceptions of Self Questionnaire (POSQ; measures task and ego orientations; Roberts, Treasure, & Balague, 1998), the Situational Intrinsic Motivation Scale for PE (SIMS-PE; assesses motivational profiles in the moment; Guay & Vallerand, 2000) twice during each sport unit, and the Sport Motivation Scale (SMS-PE; assesses student motivational profiles toward PE as a context; Pelletier, Rocchi, Vallerand, Deci, & Ryan, 2013) before and after each study. Study 1 occurred in the fall semester and Study 2 in the winter semester.

Data Collection

Motivational questionnaires. Participants completed the 12-item, two-subscale POSQ in each of four trials (twice prior to team selection and twice following team play) in each sport. A modified

stem—“When teams are picked in PE, I feel most successful when:”—preceded the 12 items on the POSQ. Participants responded to statements that assessed the strength of their task and ego orientation on a 5-point Likert-type scale for which 1 was *strongly agree* and 5 was *strongly disagree*. Students responded to statements such as “I am clearly better” (ego involved) and “I reach a target I set for myself” (task involved). The POSQ contains two six-item subscales, each designed to assess the strength of student task and ego orientations, respectively. The POSQ has been demonstrated as valid and reliable for use with this population (Gordon, 2006; Roberts et al., 1998).

Participants also completed the 16-item, four-subscale SIMS-PE in each of four trials (twice following team selection and twice following team play) in each sport. A modified stem—“Why are you currently playing for the team you are on in PE?”—followed by statements such as “Because I don’t have a choice” (amotivation) or “By personal decision” (intrinsic motivation). Students rated the degree to which the statement described them on a 7-point Likert-type scale with 1 being *corresponds not at all* and 7 being *corresponds exactly*. The SIMS-PE has been found to be a valid and reliable instrument for use with adolescents (Guay & Vallerand, 2000; Prusak, Treasure, Darst, & Pangrazi, 2004; Standage, Treasure, Duda, & Prusak, 2003; Ward, Wilkinson, Graser, & Prusak, 2008).

Last, in studies for which randomization is not possible, it is often wise to conduct a test for preexisting differences between treatment groups. Therefore, the 28-item, seven-subscale SMS-PE (Pelletier et al., 2013) was administered 1 week before the intervention began to assess differences in contextual (toward PE in general) motivation. Furthermore, to assess possible *changes* in contextual motivation, the SMS-PE was administered 1 week after the completion of the intervention. The SMS-PE stem and items focused participants’ responses on perceptions of PE in general with the statement, “Why do I participate in physical education?” The same 7-point scale was used for the SMS-PE as for the SIMS-PE. The items scores for the SMS and the SIMS scales can be reduced to their respective mean subscale scores, but it is often useful to reduce subscale scores even further, yielding a self-determination index (SDI) score—a single score representing a person’s motivational position along the self-determination con-

tinuum (Pelletier et al., 1995). An SDI score is particularly useful for assessing preexisting between and within group differences. The SMS-PE has been found to be a valid and reliable instrument for use with adolescents (Pelletier et al., 1995).

Follow-up interviews. To assess possible long-term effects (negative feelings toward PE; Jensen et al., 2014), 1 year after Study 2 was completed, captains and student's beginning of team selection ($n = 6$), middle selections ($n = 2$), and students selected near the end of team selection ($n = 6$) were invited to participate in a 5-min follow-up interview. Questions sought to explore student perceptions of the method of team selection in both conditions. The interview questions were determined by the theories used for this study (task and ego, motivation). For example, some of the questions posed during the interview were as follows: Why do you think other students are picked before other students? Do you remember where you were picked? Are kids picked because they are skilled or popular? In particular, we sought to uncover how the students felt as a result of the order in which they were publicly selected and if there were any lasting negative effects, such as those described by Jensen et al. (2014).

Additional qualitative data resulted from teacher field notes containing personal feelings and impressions as well as from student quotes and spontaneous utterances during the selection process. We also interviewed the teacher to ascertain his perceptions of both methods of team selection.

Data Analysis

Quantitative data analysis. We analyzed data from Study 1 using SPSS (version 20) and data from Study 2 using SAS (version 9.3). We conducted preliminary analysis, checks for missing data, key-stroke errors, outliers, and normality on the raw data.

We calculated all subscales scores for the POSQ and the SIMS by averaging the observed scores of associated items. We used subscale means in subsequent analyses. For each study, we calculated group means and standard deviations and bivariate correlations for all subscales for all conditions, sports, and trials, respectively.

Correlation analysis allowed for the testing of the existence of a simplex pattern (i.e., strongest correlations between adjacent subscales) in support of the proposed ordering of the self-determination

continuum (Pelletier et al., 1995). We assessed internal consistency of subscales via Cronbach's alpha. Acceptable reliability scores are generally considered to be ≥ 0.7 .

We analyzed mean differences using a between (conditions) and within (trials) RM ANOVA. In Study 2, we further split data into tertiles (based on teacher's assessment of skill level) for an additional between and within RM ANOVA analysis on the lowest and highest ranked students.

Qualitative Data Analysis

Qualitative data generated from 5-min interviews of a purposeful sampling of 14 students (six early-picked captains, two middle-picked, and six last-picked) was audiotaped and, along with researcher field notes, transcribed. We first examined transcribed data using inductive content analysis (Lincoln & Guba, 1985; Sarvela & McDermott, 1993) to identify emerging themes. Next, we employed the constant comparative method (Glasser & Strauss, 1967), first to categorize and then to compare and contrast each unit of information with all other units of information, with the intent of linking those with similar meanings (Patton, 1980).

To ensure trustworthiness, we used several recommended strategies (variety in researcher roles, addressing researcher bias, triangulation, peer debriefer, and an inquiry audit). Two of the researchers assumed an active-member role (close but intermittent association), and the third (PE instructor, conducted all study procedures) assumed a complete-member role (Alder & Alder, 1994). To address and manage researcher bias, the two active-member researchers worked closely with this school and its teachers and students via practicum and student teaching fieldwork. Additionally, the third researcher (enmeshed member) was the teacher of all student participants in this study. The primary researcher has conducted research and has published several articles in the area of AIP-PE (e.g., Barney & Christenson, 2013; Barney et al., 2012; Barney & Prusak, 2014). Of primacy to this study, Barney and Strand (2008) made repeated recommendations against the use of publicly picking teams in PE.

We used three of the four recommended strategies (Denzin & Lincoln, 2000) for triangulation of the data, namely, (a) data triangu-

lation (asking the same questions of all participants), (b) investigator triangulation (including several researchers, each with his own set of field notes and interpretations), and (c) theory triangulation (use of multiple theoretical perspectives to interpret data).

The primary researcher conducted the initial content and comparative analyses, and the second researcher acted as the peer debriefer. A peer debriefer is tasked with challenging initial interpretations and validating that they are true to the data (Hanson & Newburg, 1992), making site observations, taking field notes, and asking questions to see if researcher perceptions and conclusions are accurate (Bogdan & Biklen, 1998).

Last, once the data were analyzed and conclusions written, the third researcher conducted an inquiry audit by reviewing all documents beginning with the transcripts of the raw data and ending with the final written report. The intent of the inquiry audit is to ensure that a “paper trail” supporting the evolving analysis occurred as reported and that the conclusions are a reasonable interpretation of the data.

Results

SMS-PE: All Subjects

No significant between or within differences for contextual motivation toward PE in general were noted in either study. In other words, no preexisting motivational differences needed to be accounted for or controlled in subsequent analyses. Furthermore, as anticipated, no significant pre-to-post changes in contextual motivation occurred as a result of the intervention in either study.

POSQ: All Subjects

Subscale means, standard deviations, effect sizes, and mean alphas for the POSQ are presented in Table 1 and for the SIMS in Table 2. Mean Cronbach's alphas ranged from 0.88 to 0.94, indicating robust internal consistency for the task and ego subscales of the POSQ. Weak bivariate correlations ($r = 0.013\text{--}0.361$) were noted between task and ego subscales in each of the four POSQ trials, supporting the posited orthogonality of the two achievement orientations. Subscale

means on the POSQ indicated that students were consistently *highly task oriented* but *moderately ego oriented*, (a) in both methods of team selection, (b) before team selection, (c) after team play, and (d) across both studies. Unexpectedly, however, no significant between conditions or within trials or across sport differences were noted in either study. In other words, the practice of publicly picking teams had no more of an effect on student task or ego orientation than did a confidential draft. However, a significant Ego-Orientation Trials \times Condition Interaction, $\lambda(3, 113) = .875, p < .01$, was noted in Study 1. Specifically, the draft group was less ego oriented *following play* in each of the two sports than were those in the publicly picked teams condition. No significant team selection effects on task or ego orientations were noted in Study 2.

SIMS-PE: All Subjects

On the 7-point scale, for which 4 represented a neutral score, a comparison of subscale means on the SIMS-PE from both studies indicated that students generally experienced (a) low to moderately low levels of amotivation (Study 1: $r = 1.41$ – 3.06 ; Study 2: $r = 2.70$ – 3.15) and external regulation (Study 1: $r = 2.90$ – 3.92 ; Study 2: $r = 3.04$ – 3.81) and (b) *neutral* to *moderate* levels of identified regulation (Study 1: $r = 3.14$ – 4.45 ; Study 2: $r = 3.54$ – 4.05) and intrinsic motivation (Study 1: $r = 4.24$ – 5.20 ; Study 2: $r = 3.79$ – 4.59). However, once again, no significant between methods of team selection or between trials (after team selection and following team play) were noted. In other words, in both studies, in both methods of team selection, and across all sports, students (a) were minimally amotivated and had only a slight sense of being externally controlled and (b) reported mostly neutral perceptions of positive motivation (identified regulation and intrinsic motivation).

Table 1

Means, Standard Deviations, Effect Sizes, and Alphas for POSQ Subscale Scores by Questionnaire

Condition	Trials								M	α
	POSQ1		POSQ2		POSQ3		POSQ4			
	M	SD	M	SD	M	SD	M	SD		
Study 1										
Public Picking of Teams										
Task	1.60	.75	1.69	.89	1.88	1.09	1.83	.96	.93	
Ego	2.83	1.16	2.71	1.09	2.82	1.11	2.81	1.14	.94	
Confidential Draft										
Task	1.80	.68	1.99	.867	1.84	.78	2.02	.95	.88	
Ego	2.80	.95	3.00	.94	2.63	.89	2.70	.99	.91	
Study 2										
Public Picking of Teams										
Task	1.71	.72	1.82	.80	2.00	1.09	1.92	.96	.91	
Ego	2.78	.94	2.82	.95	2.91	.95	2.87	1.06	.90	
Confidential Draft										
Task	1.69	.65	1.96	.87	1.73	.75	1.99	1.11	.88	
Ego	2.64	.99	2.69	.84	2.63	.80	2.74	.96	.89	

Note. Responses measured using a 5-point scale for which 1= *strongly agree* and 5 = *strongly disagree*. Therefore, lower scores indicate a stronger task or ego disposition. Mean alphas associated with all POSQ subscales from all four trials demonstrated acceptable levels of internal consistency ($\alpha \geq .7$).

Table 2*Means, Standard Deviations, Effect Sizes, and Alphas for Subscale Scores by Questionnaire*

Condition	Trials								M α	
	SIMS1		SIMS2		SIMS3		SIMS4			
	M	SD	M	SD	M	SD	M	SD		
Study 1										
Public Picking of Teams										
AM	3.06	1.82	2.91	1.54	2.49	1.58	2.84	1.68	.77	
ER	3.92	1.95	3.63	1.60	2.90	1.62	3.29	1.70	.70	
IR	4.45	1.54	3.82	1.45	4.44	1.23	4.00	1.47	.88	
IM	5.01	1.50	4.24	1.43	5.20	1.89	4.68	1.44	.86	
Confidential Draft										
AM	2.73	1.48	2.80	1.41	2.99	1.52	2.90	1.48	.77	
ER	3.14	1.43	3.26	1.52	3.50	1.40	3.55	1.93	.73	
IR	4.15	1.40	3.80	1.82	4.08	1.29	4.02	1.32	.81	
IM	4.59	1.31	4.35	1.33	4.47	1.36	4.27	1.25	.86	
Study 2										
Public Picking of Teams										
AM	2.70	1.23	3.08	1.51	2.95	1.30	3.15	1.55	.79	
ER	3.04	1.57	3.32	1.40	3.25	1.22	3.49	1.47	.80	
IR	3.79	1.31	3.97	1.32	4.05	1.24	3.63	1.40	.70	
IM	4.33	1.42	4.42	1.22	4.34	1.30	3.79	1.51	.74	
Confidential Draft										
AM	2.78	1.32	2.88	1.30	2.74	1.42	2.95	1.47	.81	
ER	3.81	1.62	3.57	1.52	3.62	1.51	3.72	1.59	.86	
IR	3.54	1.29	3.67	1.32	3.73	1.39	3.84	1.52	.75	
IM	3.96	1.34	4.23	1.42	3.89	1.55	4.23	1.75	.83	

Note. Responses measured using a 7-point scale for which 1 = *corresponds not at all* and 7 = *corresponds exactly*. Mean alphas associated with SIMS subscales from all four trials demonstrated acceptable levels of internal consistency ($\alpha \geq .7$). AM = amotivation; ER = external motivation; IR = identified regulation; IM = intrinsic motivation

Study 2 POSQ and SIMS-PE Results By Skill-level Tertiles

To ascertain if lesser skilled students were adversely affected by the method of team selection, participants in Study 2 were separated for further analysis into tertiles based on teacher rankings for skill level (lowest: $n = 39$; middle: $n = 39$; highest: $n = 39$). Surprisingly, skill level tertiles comparisons on POSQ and SIMS-PE subscale means revealed no significant differences between conditions or within trials for the *least* and *most* skilled tertiles. In other words, those who would likely be most vulnerable to adverse effects of publicly picked teams were no more bothered by the practice than was anyone else in class.

Fixed effects were found to be nonsignificant, but a few notable interaction effects were noted. Specifically, within the high skill level tertile, one method of team selection was by sport interaction, $F(1, 38) = 4.36, p < .05$. These students felt more eternally controlled in basketball when drafted than they did in volleyball when picked publicly.

Qualitative Results

In hopes of finding additional understanding to the nonfindings from the survey data, we sought a purposeful sampling of students from Study 2 for follow-up interviews. Analysis revealed three major themes emerging from the data: (a) selection motives, (b) differentiation of conceptions of ability, and (c) empathy.

Selection motives. Students commented on two major reasons why a person may be selected to a team: (a) athleticism or sport skill and (b) friendship or popularity. These motives were nearly equal in their frequency, often mentioned in the same thought. Selection based on athleticism was typified by comments such as “It [team selection] is determined by skill level. If you have a captain that is athletic, he will choose athletic kids to be on his team . . . so they can win!” (Student 7, eighth grade, low pick). When asked why some are picked before others, one student remarked, “Athletic abilities. Because people want to win and have fun. The ones that want to have fun will pick their friends. And the ones that want to win pick the athletic ones” (Student 12, eighth grade, middle pick).

As often, however, students indicated that choosing team members was more about being with their friends: “I was just hoping to

have some of my friends on the team. Some kids may be going for their friends first. Or if they want to win, they will go for the better kids” (Student 6, seventh grade, low pick). When asked if it was important to win, he responded, “Yes. But, it is good to be with friends and be happy” (Student 7, eighth grade, low pick). Others still expressed that being with friends and winning was best of all: “You want someone who is good. It is important to get the best kids on your team or your best friends.” Question: “If you can win and have your friends, this is the best of both worlds?” Answer: “Yes” (Student 5, eighth grade, middle pick). Question: “Do you think friends like to hang together?” Answer: “Yes. In my PE class now, all the football players are in one group. Everyone calls them the dream team because they are always together” (Student 8, eighth grade, low pick).

Three of the last-picked students explained that they did not care about the selection process. “Yes [get it over with], I don’t care what team I’m on. I just want to play.” Question: “Was it important to have good players on your team?” Answer: “No. I just wanted to get playing” (Student 6, seventh grade, low pick). Similarly, Student 10 (seventh grade, low pick) commented, “It’s just a game. I just wanted to play the game!” Last, Student 4 (seventh grade, low pick) mentioned, “A lot of kids didn’t care. No one was really upset [in what order] they were picked, more where they got picked to.”

Also of interest were comments that seemed to indicate that certain students resented the draft method because they were denied input as to who was on their teams: “[When draft teams are posted] on the wall, you put everyone together. But when they pick teams, they want to get to know you” (Student 7, eighth grade, low pick).

Differentiation of conceptions of ability. Whether as a coping mechanism or an evolving sense of ability (Nicholls, 1984), many students admitted to understanding and accepting reasons for the order in which they were picked. Some attributed being a late pick to self-perceptions of lacking skills or athleticism. Question: “If you are not picked first in soccer, how do you feel?” Answer: “It could be upsetting. But I know why. Because I am no good at that. I accept that” (Student 11, eighth grade, high pick). Student 8 (eighth grade, low pick) admitted, “[Not a big deal] because I knew I would be one of the last ones picked. So I really didn’t care.”

Awareness of sport-specific abilities also came into play: “Depending on the sport, in football [I am picked] toward the front, basketball toward the middle, volleyball toward the middle, and wrestling, the first” (Student 12, eighth grade, middle pick). Knowing their own abilities seemed to provide a buffer of realism for some students. Question: “Do you feel [picking teams] is a big deal?” Answer: “I feel I need to improve in the sport. I was picked toward the end. In soccer, I feel good about myself” (Student 11, eighth grade, captain).

Empathy. Pleasantly surprising were expressions of empathy or sympathy for those who were picked last—even from those who were high picks. Speaking of the public selection process, Student 2 (eighth grade, high pick) explained,

You can see their expression. If they are picked first, they are glad. If they are picked last, they are like, nobody wanted them on their team . . . because of their ability and how much they were liked. Mostly ability. The kids that were picked last were upset. They know what happened and realized . . . If it was me, I wouldn't be too thrilled.

Likewise, “It can be [a big deal] because it excludes people, if you are the last picked” (Student 3, eighth grade, high pick). Comparing the two methods of team selection, Student 5 (eighth grade, middle pick) commented, “Teams were more fair [when drafted]. Teams were more one-sided when captains did pick.” Question: “Do you feel sorry for those students that were picked last?” Answer: “Yes, because I would not want to be in their position. It is not fun being the last one picked. It means you don't have any friends or you are not very good.”

Student 11 (eighth grade, high pick) mentioned that he had often witnessed acts of kindness associated with the picking of teams at this school: “At this school, they do that. In [my last school in a different state], they did not do that. They picked on how good you were. Here at this school, they pick on how good you are, being with friends and kindness.” Student 1 (eighth grade, high pick) mentioned a way to spare the feelings of a usually last-picked student: “To keep it fair for those that get picked last, pick them third or fourth. You never know. There could be a dark horse.”

Discussion

We wish to state at the onset of this section that, despite the findings, or nonsignificant findings, reported herein, we are not inclined to recommend the practice of publicly picking teams in physical education for reasons we will explain. But neither can we ignore these survey outcomes just because they were not what we anticipated. Although it may be unusual, we think it is also necessary to provide additional background to these studies— perhaps as a scholarly cautionary tale.

Following the first study in the fall semester, we concluded that we must have made some fatal error in collecting the data that explained the complete absence of conditional effects. Our theories were solid, our questions pertinent, our design appropriate, and the instruments reliable. So how did the intervention not produce the anticipated results? Researcher or instrument error seemed the only plausible explanation, though we could not find it. In fact, students answered the survey questions repeatedly with remarkable consistency. On the surveys, students were unbothered by the practice of publicly picked teams. Nonetheless, we decided a second study was necessary (with the addition of a crossover design). Surprisingly, those results were nearly identical to those from the first study. No matter how we looked at or analyzed the data, we simply could not reconcile our—dare I say it—*biases* with these nonfindings. Then recently Jensen et al. (2014) equated this practice to a form of bullying, affecting long-term physical activity motivation, which prompted our return to the school to ask the students directly how this practice made them feel. Surely, we thought, we could probe and tease out what we knew to be true: that the public picking of teams had earned its place in the Physical Education Hall of Shame for good reason!

Returning for follow-up interviews helped us to interpret the nonsignificant findings from the survey data *and* to uncover perceptual issues not measured in the survey questions. For example, the interview data indicated that some students seemed to *resent* being placed on drafted teams primarily because they felt they had no say in the matter. They could not, for example, chat among themselves and make group decisions about team members or choose to play with their friends. Prusak and Darst's (2002) students were attracted to activities largely by a strong social component (i.e., being able to

choose with whom they played). In additional studies (Prusak et al., 2004; Ward et al., 2008), the provision of choices made significant positive improvements in secondary physical education students' motivational profiles. Perhaps the lack of autonomous control in the draft method contributed to feeling slightly externally controlled and only marginally motivated in the present studies. Indeed, because publicly selecting teams was commonplace on the playground, in pickup games at lunch, or in games in the neighborhood, many seemed to resent the draft method used only in physical education.

Another recurring theme was that team selection, whatever the method, served only the simple purpose of facilitating game play. Game play was the paramount issue, and how teams were selected was comparatively insignificant. We are reminded of the frequent refrain from our own former students: "Can't we just play?" Of course, we patiently pointed out to our "uneducated" students that to play we had to pursue a list of national objectives, without which they would not be successful nor enjoy themselves. Of course we cannot just "let them play!" It would be irresponsible on our part to do so. Recently, Johnson (2014) revisited this topic (i.e., play as the central purpose of physical education), insisting that the field suffers from a lack of a clearly defined purpose, opting instead for a wish list of perhaps unattainable objectives (Pangrazi, 2010). Johnson provides a compelling argument to reassess how play for play's sake is valued in physical education:

Physical education, of all subject matters, may have the greatest draw for students because the content is *inherently playful* [emphasis added]—the prospect of play attracts students to physical education. In too many cases, however, we do more to stifle than build student enthusiasm by expecting students to learn content they are not ready to learn, participate in activities unrelated to their interests, and follow unnecessary rules and policies. In other words, *we plug our content into the rigid structure of education with multiple standards, objectives, and time requirements and in too many cases end up robbing the content of its inherent playful nature* [emphasis added] . . . we need to allow the inherent playfulness of our content to have full sway in physical education. As Kretchmar (2006)

poignantly observed, “If we cannot get more than 80 percent of our students to say that physical education is absolutely the best part of the school day, then we are probably *squandering* [emphasis added] our [content] (p. 7).” (pp. 35–36)

In our well-intentioned efforts to provide a quality physical education, we have possibly, by our rigid *structures* and *strictures*, inadvertently, frequently, and perhaps unnecessarily inserted ourselves into the play equation—certainly something to consider.

We have additional reasons to not recommend the practice of publicly picking teams. Pedagogically speaking, it is a poor use of class time. The 10–15 min it takes to arrange teams could be used for more productive achievement purposes. That being said, we recommend that play be preserved, enriched, and extended by minimizing unnecessary intrusions, whatever their source (e.g., poor management, chasing of unattainable outcomes, overemphasis on skill and drill).

Also, we were surprised that student motivational responses indicated that a confidential draft was no better than publicly picked teams, but we recognize that neither was it any worse. In both conditions, across all sports, and across all trials, students (a) were equally and highly task oriented and moderately ego oriented and (b) experienced low levels of amotivation, were slightly externally regulated, and were only moderately motivated. Keep in mind also that the between conditions comparisons, even within the skill level tertiles, were computed on mean scores. The possibility exists that some students are indeed bothered or perhaps damaged by the practice, but this is masked in the forming of group means. In other words, certain individuals are possibly negatively affected by the practice—if it is only one person in a class, in our opinion, the cost is too high. So if we are to err, let us err on the side of caution, particularly in light of the additional insight gleaned from the interview responses.

Previous anecdotal treatment of this topic relates that publicly picking teams has caused immediate and long-term feelings of “humiliation, embarrassing, degrading, emotionally, scarring, painful and damaging” (Landers, 1991, p. 18). We were pleasantly surprised to note that students from all skill levels exhibited sympathy or empathy for those who may be more vulnerable to the practice. Some

students, maybe most, were able to cope with the possible negative implications of public team selection by coming to a realistic self-assessment of their skills and abilities, but others were not. Most students felt a sense of resilience through acceptance, but others felt it was once more evidenced that they did not fit in. For them, getting “it over with” or “I didn’t care” hint very strongly of learned helplessness. It is precisely for those students that we ultimately recommend against this practice. Too many good alternatives are pedagogically and probably emotionally more suitable to producing a more positive play experience for all, certainly, but for the most vulnerable, particularly.

Limitations

A limitation of this study is the inability to generalize these findings to other junior high school students in other parts of the United States. Because of the use of a sample of convenience from one junior high school physical education class, further generalization of this data must be approached cautiously. Further study should be done using multiple junior high school physical education classes at different schools and in different regions of the United States to explore the reproducibility of the process and findings.

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