PEDAGOGY

Here Is What Interests Us! Students' Reconceived Physical Education Activity Offerings in an Inner-City Middle School

David Kahan

Abstract

Urban middle school physical education teachers undertook action research to understand activity preferences of their sixth and seventh graders (n = 701) as they sought to modify curriculum for enhancing student engagement. Students completed an anonymous survey of basic demographic characteristics and interest in participating in 24 physical education activities. Responses were analyzed by vector analysis where the magnitude and direction of preference was taken into account to generate standardized T-scores Difference scores were used to compare preferences by gender, ethnicity, and grade, with $|T_{difference}|$ greater than 16.4 considered significant ($p < .05$). For gender, males more preferred football and females more preferred volleyball, yoga, and jump rope than the opposite gender. For ethnicity, Hispanics more preferred soccer than Asians; and Hispanics, Blacks, and Asians more preferred their own ethnonymic games and dance activities than their counterparts. Preference differences were not found between grades. Urban physical educators—and possibly others—should consider gender- and ethnic-based preferences when making curricular content and pedagogical decisions.

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Over 20 years ago, Sallis and McKenzie (1991) cast school physical education (PE) as centrally and distinctly positioned to address public health concerns. Sadly, as only 33% of adolescents take daily PE classes (Eaton et al., 2010), it has been fairly branded "the pill not taken" (McKenzie & Lounsbery, 2009, p. 219). Worse, students at lower income schools spend 20% less time in moderate-to-vigorous physical activity and score lower on FitnessGRAM® than students in higher income school districts (University of California Los Angeles Center to Eliminate Health Disparities & Samuels and Associates, 2007). Improving these students' welfare through PE is a worthy goal; however, quality PE in urban settings remains elusive (McCaughtry, Barnard, Martin, Shen, & Kulinna, 2006). Many barriers to teaching PE in urban settings have been identified, including disaffected students, uninvolved parents, community and social problems, and dire work conditions, to name several (Clements, 2009).

One barrier, however, that may be more easy to overcome is irrelevant and outmoded curriculum. Specifically, quality PE in inner-city settings is more likely if a one-size-fits-all traditional curriculum is replaced. Inclusive and culturally responsive teaching is a formalized competency in standards-based PE teacher education programs (National Association for Sport and Physical Education [NASPE], 2008) and requires that teachers "inquire into particular interests, needs, and strengths of students" (Lund & Tannehill, 2010, p. 130). Curriculum reform then is partially contingent on reaching out to students to ascertain what motivates them to be physically active. With such information, adjustments can be made that may include adding or deleting activities, teaching a disliked activity differently, and teaching a particular activity long enough so that students become skilled and come to enjoy it (Kovar, Ermler, Mehrhof, & Napper-Owen, 2001).

Standards-based PE consists of six articulated content standards that do not specify or regulate activities for achieving them (NASPE, 2004). High-quality PE programs are partly identified by their meaningful content (NASPE, 2004), which is further defined by state and local policies and frameworks. Despite these documents to guide them, urban educators must still gauge their learners' natural predilections for a variety of physical activities. Although (not) liking physical activities is attributable in part to teachers' content and pedagogical content knowledge, it is rooted in students'

previous experiences and consequent associations. Thus, teachers should come to know and understand students' activity preferences to provide a more meaningful PE experience.

Preferences reflect level of interest, which is broadly categorized into two types referred to as personal and situational (Schraw & Lehman, 2001). Both types of interests are important to consider as each may subtly affect the other and both exert their effects at different stages of learning. Because personal interest, the product of cumulative experiences, is more stable and differs by gender and race, it is harder to change (Blankenship, 2008; Subramaniam, 2009). It represents the set of predispositions and values that individual students already have toward specific content. In contrast, situational interest reflects the immediate environment, with teachers challenged to first catch and then hold it (Mitchell, 1993). Holding interest differs by gender and race as it relates to personal meaning ascribed to the physical activity (Blankenship, 2008). In PE, situational interest is heightened when activities are considered instantly enjoyable, which is in turn mediated by novelty and exploration components (Chen, Darst, & Pangrazi, 2001). Simply put, identifying what students already like and packaging that along with relatable, enjoyable, and novel content may enhance interest to learn and participate.

Curriculum content is important at every level; however, the middle school years (ages 11 to 14) present a pivotal time. Although physical activity level generally declines as young people age (Eaton et al., 2010), a drop-off between upper elementary grades to the first year(s) of middle school is not predestined (Morgan, Graser, & Pangrazi, 2008). From a curriculum perspective, a goal of middle school PE is to introduce students to the widest variety of content and to explore possibilities (Graham, Holt/Hale, & Parker, 2007). NASPE (2009) qualifies appropriate practice in this domain by advising teachers to (a) intentionally select culturally diverse activities, (b) not teach American team sports exclusively, and (c) offer students input regarding activities to be covered.

Unfortunately, although there is evidence of PE activity preferences among students attending urban schools, it does not adequately generalize to middle school. Quantitative preference surveys conducted in inner-city schools have sampled mixed-grade and higher grade levels. For example, Tannehill and Zakrajsek (1993) found girls liked volleyball more than boys and Asians liked volleyball more than Blacks, Hispanics, or Whites. Among ninth

graders across six ethnic groupings, Hill and Cleven (2005) found significant differences for 13 of 37 activities with preference gaps ranging between 21.4% (gymnastics) and 46.5% (football).

Using qualitative methodologies, researchers have gleaned deeper insights into physical activity preferences of urban middle school students. A teacher who sought to understand student emotion discovered that females wanted to play football because it was popular in their neighborhood but did not know how (McCaughtry, 2004). Students considered competitive team sports fun, but for different reasons based on skill level; and moderate- and low-skilled students felt insufficient skill practice, and inequitable game play opportunity reduced their enjoyment (Bernstein, Phillips, & Silverman, 2011). Flory and McCaughtry (2011) found that providing culturally relevant PE hinges on teachers' understanding of and response to five community dynamics that influence access to out-of-school physical activity: Students "craved activities done easily in their homes, with friends and family, and activities with specific cultural meaning" (p. 57). Collectively, these and other studies allude to the need to socially construct PE content from the bottom up, offering students "real choices…as active agents in their own education instead of passive recipients of teacher-designed and constructed knowledge" (McCaughtry, Tischler, & Flory, 2008, p. 276).

For this particular study, a PE department's staff undertook action research inquiry of their students' activity preferences so that they could identify and provide in the future, if possible, a more relevant PE curriculum. The impetus for the study was rooted in these teachers' self-perception that many students in their classes were disengaged, and one possible explanation for their disinterest lay in stale and irrelevant curriculum. Furthermore, teachers felt that students' activity preferences would differ based on age, gender, and ethnicity. In light of introductory passages, ascertaining a culturally relevant curriculum based on a survey of three demographic characteristics and specific activities may at first appear overly reductionist and contrary to the tenets of social constructivism in PE (Azzarito & Ennis, 2003). It was, however, a feasible starting point in the reform process at this particular urban middle school and allowed for a multitude of student voices to be efficiently heard.

Methods

Situational Context: Neighborhood and School

Kent Middle School is located in a designated redevelopment project area in San Diego's (CA, USA) City Heights neighborhood (population: 78,983; primary ethnicities: 57.5% Hispanic, 17.8% Asian/Pacific Islander, 12.7% Black; percentage population aged 10 to 14: 8.1%; median household income: $26,538). The school is located 0.5 miles from the community's central recreation center, which offers free and low-cost recreational and competitive programs in dance, tennis, swimming, self-defense, basketball, soccer, flag football, water polo, and aerobics. Two for-profit soccer leagues catering to Hispanics offer low-cost youth soccer year-round at the center's fields. Across from the recreation center is a police substation, city library, and retail urban village. In 2007–2008, the 12-year-old school did not meet overall adequate yearly progress criteria. As of October 2008, it had a student enrollment of 1,256 students of which 77.4% were Hispanic, 10.3% were Asian (e.g., Vietnamese, Cambodian), and 9.6% were Black (e.g., African American, East African). The school's suspension rate of 29.5 student suspensions per 100 students was about 6.5 points higher than the district average; less than 40% of students achieved proficient or advanced standing on state standardized testing in English, math, and science; and 4.3% of seventh graders met all six state fitness standards. For the present study, 701 sixth and seventh graders participated in the activity preference survey.

Context Conditions: Physical Education

PE is taught in approximately 90-min blocks to an entire grade by five PE teachers on a cycle of 5 days per 2 weeks. Located in an unattached building are locker rooms, small indoor gym, fitness center, and traditional classrooms for each teacher, which are used to teach health, show videos, and have students complete assignments and exams. Outdoors consists of a lower asphalt space comprising 11 handball walls/courts and three basketball courts (one was half court), and an upper space comprising a large grass field (area: about 4,200 m^2) and five additional basketball courts. At the time of the study, teachers were in the midst of ordering new and replacement equipment, which was purchased by an auxiliary charitable foundation administering the City Heights Educational

Collaborative. The Collaborative is an ongoing K–16 partnership aimed at positively impacting the academic achievement of students in four neighborhood schools and improving upon the way educational professionals working in the inner city are trained and supported. Participation in the Collaborative affords an opportunity to regularly engage in professional development meetings and workshops aimed at improving pedagogical practice with specific focus on providing standards-based, developmentally appropriate curriculum. Formal evaluation of the PE program by the school district's National Board-certified PE and health resource teacher revealed multiple inappropriate practices (NASPE, 2009). The associate director of the Collaborative, along with the author, regularly met with Kent teachers to determine their needs and goals, one of which was to better understand students' activity preferences. They intended to use results to recalibrate the curriculum to one that students would find more relevant, which in turn they felt would lead to greater student engagement and fewer managerial problems. Findings reported herein were first shared with Kent teachers in the forms of descriptive tables, explanation, and discussion. Advisement was provided as to steps to (not) take based on survey results and teachers' subsequent questions.

Questionnaire

Content was based on previous PE activity preference surveys that included middle school students (Greenwood & Stilwell, 2001; Hill & Hannon, 2008; Strand & Scantling, 1994). Demographic items were listed first and were followed by a list of 24 physical activities, some of which were already part of the curriculum. Teachers requested inclusion of specific ethnic activity types and examples (e.g., African American dance: krumping, locking, popping; Asian games: đá cầu, kator, ndi, sepakraga; Latin dance: bachata, ballet folklórico, cumbia). The teachers, Collaborative associate director, and Collaborative evaluation team reviewed the questionnaire for suitability (e.g., format, content/wording, layout), and after two iterations, the final version was approved for administration. Instructions directed students to indicate interest in learning or participating in each activity under a proviso that results might shape future PE offerings. Response options included *Yes*, *No*, and *Unsure*. The latter category was included so as not to force students into choosing to include or eliminate an activity from

consideration if they felt ambivalent. Care was taken to design a questionnaire that was school related and aesthetically appealing; the obverse side of the questionnaire included icons of the school mascot and the reverse side included icons for 19 activities in the header and footer.

Administration

The questionnaire was administered in each teacher's classroom with students seated at desks. Over 2 consecutive days—different classes attended PE on alternating days—the survey was administered as part of regular class activities. Students were provided with a copy of the questionnaire, recording form, and pencil. Teachers explained the purpose of the questionnaire and gave students an overview of each background information question, as well as of the activity preference section. They instructed students to avoid talking so as not to influence others' responses. Students were reassured that there was no right or wrong answer so they should answer truthfully. The author's university institutional review board approved the study post hoc (i.e., analysis of preexisting data with no links to student identity).

Data Treatment

Raw data (n = 701) were scanned into DataDirector, a Web-based data management tool used within the school district, and subsequently compiled into a Microsoft Excel workbook. These data were examined for multiple, unacceptable, and missing responses and cleaned. For ethnic group, due to low frequencies, *White* and *Multiple* categories were deleted. The resultant workbook was imported into SPSS 17.0 for further analyses.

Analysis

Because three-choice response option scaling for physical activity preferences was used, a vector analysis was employed to interpret raw data. Scores of -1, 0, and 1 were assigned to *No*, *Unsure*, and *Yes* answers, respectively. Thus, the first and last choices possessed direction and magnitude and the middle choice exerted influence by reducing overall direction. A mean for the entire group was calculated for each activity with positive values indicating some preference for an activity, a value near or at 0 indicating uncertainty about an activity, and a negative value indicating some aversion for an activity. For purposes of comparison

and to increase comprehensibility (i.e., eliminate negative values) for teachers, vectors were transformed into *T*-scores (i.e., 50 + 10*z*) for each activity based on the distribution of 24 activity vectors. These were then ranked from 1 to 24 with scores above and below 50 indicating preference and lack of preference, respectively, for particular activities. As ranks mask the true strength of preference for activities within and across categories, absolute value *T*-score differences were considered significant if they exceeded 16.4 (i.e., 1.64*z*, $p < .05$) and trending toward significant if they exceeded 13.4 (i.e., 1.34*z*, $p < .10$). All significant findings and all trends, except for one, revealed that the higher subgroup preferred an activity (i.e., $T > 50$) and the lower subgroup(s) did not prefer an activity ($T < 50$).

Results

Respondents were predominantly Hispanic. More seventh graders and slightly more females were represented (Table 1).

Table 1

Demographic Data Frequencies

Variable	Frequency	Percentage	Valid Percentage
Grade			
6th	319	45.5	46.2
7th	372	53.1	53.8
Missing	10	1.4	
Gender			
Male	338	48.2	49.3
Female	348	49.6	50.7
Missing	15	2.1	
Ethnicity			
Black	73	10.4	11.3
Asian	86	12.3	13.3
Hispanic	488	69.6	75.4
Other[a]	54	7.7	

[a]White, multiple races, missing response.

Overall physical activity preferences and preferences according to demographics are presented in Table 2. Among the top 10 activities overall, a wide variety of activities by classification were noted including four team sports (basketball, soccer, volleyball, football), three individual/dual sports (playground games, target games, racquet games), two conditioning activities (weight training,

tag games), and one combative (martial arts). (Only the four team sports were regularly offered as part of the current curriculum.) Ethnonymic activities were generally ranked low and included the four lowest overall. Hispanic games (12th) and Latin dance (19th) were the highest ethnonymic game and dance subcategories, respectively.

For grade level, sixth and seventh graders most preferred playground games and basketball, respectively (Table 2).

Significant differences between grade levels were not observed: the largest difference was noted for tag games ($T = 7.4$, $p = .23$), which sixth graders more preferred than seventh graders.

For gender, both males and females ranked five activities among the overall top 10: basketball, soccer, playground games, target games, and tag games (Table 2). Significant differences between genders were observed for four activities with football ($T = 17.0$, $p < .05$) more preferred by males and volleyball ($T = 18.2$, $p < .05$), yoga ($T = 16.8$, $p < .05$), and jump rope ($T = 24.2$, $p < .01$) more preferred by females. Two activities demonstrated trends toward significance: weight training ($T = 14.3$, $p = .08$) and field/floor hockey ($T = 15.6$, $p = .06$) were more preferred by males than females.

For ethnicity, all three ethnic groups ranked seven activities among the overall top 10, including basketball, playground games, target games, weight training, martial arts, volleyball, and football (Table 2). Significant differences between ethnic groups were observed for five activities with one among the overall top 10. Specifically, soccer ($T = 17.1$, $p < .05$) was more preferred by Hispanics than Asians and trended ($T = 14.9$, $p = .07$) toward being more preferred by Hispanics than Blacks. Outside the overall top 10, Hispanic games ($T = 21.5–23.1$, $p < .05$) were more preferred by Hispanics and Asian dance ($T = 19.4–24.2$, $p < .05$) was more preferred by Asians than their counterparts. Additionally, Asian games ($T = 18.1$, $p < .05$) were more preferred by Asians than Hispanics and trended ($T = 16.1$, $p = .05$) toward being more preferred by Asians than Blacks. African American dance ($T = 21.3$, $p < .05$) was more preferred by Blacks than Hispanics and trended ($T = 15.0$, $p = .07$) toward being more preferred by Blacks than Asians. Two additional activities demonstrated trends toward significance: Blacks more preferred gymnastics ($T = 16.4$, $p = .05$) than Asians, whereas Hispanics more preferred Latin dance ($T = 16.0$, $p < .06$) than their counterparts.

Table 2

Overall and Demographic Rankings of Physical Education Activities by T-score

Overall		Grade		Gender		Ethnicity		
Rank	Activity[T-score]	6th	7th	Male	Female	Hispanic	Asian	Black
1.	Basketball[63.8]	4[60.2]	1[66.3]	3[63.2]	4[59.6]	2[61.9]	3[61.7]	1[66.1]
2.	Soccer[61.9]	3[60.7]	2[62.7]	4[62.8]	5[56.7]	1[64.4]	15[47.3*]	14[49.5†]
3.	Playground games[61.6]	1[62.8]	3[60.3]	7[57.6]	3[62.2]	4[59.1]	1[66.7]	3[60.6]
4.	Target games[59.6]	2[60.8]	6[58.3]	5[60.5]	7[55.8]	5[58.0]	5[61.2]	4[60.0]
5.	Weight training[59.3]	7[59.3]	5[59.0]	1[64.4]	14[50.1†]	3[59.6]	10[52.0]	6[57.7]
6.	Martial arts[57.4]	5[60.0]	8[55.1]	6[59.4]	13[52.4]	9[53.8]	2[62.6]	2[61.8]
7.	Volleyball[57.4]	9[55.4]	4[59.1]	15[47.8*]	1[66.0]	7[56.3]	6[60.2]	5[58.2]
8.	Football[57.2]	8[57.3]	7[56.8]	2[64.0]	17[47.0*]	8[55.5]	7[60.2]	8[57.1]
9.	Tag games[55.3]	6[59.4]	11[52.0]	10[54.1]	9[55.0]	10[53.5]	8[58.8]	11[54.3]
10.	Racquet games[52.4]	13[50.1]	9[54.4]	13[49.2]	8[55.4]	14[50.9]	4[61.6]	16[48.9]
11.	Handball[51.9]	10[53.3]	12[50.6]	9[55.2]	16[47.9]	11[52.6]	9[52.5]	15[48.9]
12.	Hispanic games[51.3]	12[50.4]	10[52.2]	14[48.0]	10[54.8]	6[57.2]	23[34.1*]	20[35.7*]
13.	Gymnastics[49.9]	14[49.2]	13[50.5]	17[44.0]	6[56.6]	15[50.6]	19[40.8†]	7[57.2]
14.	Running/powerwalking[49.8]	11[50.9]	17[49.0]	11[53.0]	18[46.1]	13[51.4]	21[40.1]	13[51.8]
15.	Jump rope[49.4]	17[48.2]	14[50.3]	21[38.1†]	2[62.3]	16[49.4]	16[45.8]	12[51.9]
16.	Obstacle course[48.8]	18[48.0]	15[49.5]	12[52.2]	19[45.5]	18[48.0]	12[50.5]	10[54.4]
17.	Field/floor hockey[47.8]	15[49.0]	19[46.6]	8[55.5]	20[39.9†]	17[49.2]	20[40.2]	18[44.7]
18.	Softball/cricket[47.6]	19[45.5]	16[49.2]	16[47.0]	15[49.2]	19[47.7]	14[49.0]	17[47.7]
19.	Latin dance[47.5]	16[48.5]	18[46.6]	18[42.4]	11[54.0]	12[51.8]	22[35.8†]	21[35.7†]
20.	Yoga[43.6]	20[44.0]	20[43.7]	22[36.7*]	12[53.5]	20[44.6]	17[44.5]	19[43.5]
21.	African American dance[36.2]	21[35.6]	21[37.1]	20[38.4]	21[38.2]	21[34.6*]	18[40.9†]	9[55.9]
22.	Asian games[33.0]	22[31.5]	22[34.6]	19[38.8]	24[29.7]	22[31.9*]	13[50.0]	22[33.9†]
23.	African games[29.2]	23[30.6]	23[28.6]	23[34.6]	23[30.1]	23[30.8]	24[32.8]	23[33.4]

Note. The higher *T*-score value in each case serves as the basis of comparison.
†$p < .10$. *$p < .05$.

Discussion

Overall

Students as a whole preferred a variety of activity types with team sports being the most popular (i.e., top two and four of the top 10 preferences). Grade level was not related to preference, but gender and ethnicity were. As questionnaire items reflected a mélange of current traditional offerings, as well as prospective novel nontraditional and ethnic choices, both personal and situational interest were tapped. Results suggested that gender, ethnicity, and their interaction influence one's personal interest in preferring some activities more than others. With only activity names for students to go on, novelty and instant enjoyment were most likely the only dimensions of situational interest to exert influence on preferences. These too may be have been mediated by gender and ethnicity.

The variety of preferences based on activity classifications calls for diversifying middle school curriculum (NASPE, 2009). Team sports typically form the basis of the multiactivity model and were a major component of the curriculum at Kent. Their preference here is found elsewhere in the urban literature (Bernstein et al., 2011). That these team sports were already part of the curriculum, and the study was conceived in part to address student disinterest and nonparticipation, suggests that how they are organized and taught needs to be changed. Kent physical educators must think differently about how they teach sport; repackaging it in ways that stress community-building, student ownership, and equitable engagement has proved effective at bridging gender and skill divides in urban schools (Ennis et al., 1999).

Basketball was preferred most overall, which reinforces the culture of basketball that urban physical educators encounter (McCaughtry et al., 2006). Conditions in the school and community may have perpetuated this preference. Specifically, eight outdoor basketball courts were available, second only to the number of handball courts. The high school that Kent feeds into boasted a resurgent basketball program, which in the year of the study went 28–5 and made it to the regional playoffs. Their accomplishments were regularly spoken of with pride on campus and a rooter bus was even provided to shuttle Kent students to high school games.

The six nonteam sports among the overall top 10 were either absent from or not fully developed within the curriculum. They

should guide Kent teachers when selecting alternative activities and pedagogies for delivering them. Beyond the means of this survey, given the support available from the Collaborative and the school district's resource specialist, formal curriculum analysis tools (Centers for Disease Control and Prevention, 2006) in conjunction with multicultural student inventories (Fleming, Mitchell, Gorecki, & Coleman, 1999) should be used to detect/expose flaws in curricular scope. The absence in this study of specific activity preferences found in other surveys (e.g., Greenwood & Stillwell, 2001; Hill & Hannon, 2008; Strand & Scantling, 1994) partially reflects conditions found at Kent and in the surrounding neighborhood that in tandem create cultural relativism toward physical activities not found in other studies.

Grade Level

Based on cross-sectional data, Hill and Hannon (2008) found that students' interest level in almost all PE activities declines between Grades 7 and 9. However, no such erosion was observed between Grades 6 and 7 in the present study. Although activity rank by grade differed by as many as six places, no activity was more preferred by one grade based on *T*-score differences. In general, seventh graders ranked team sport and weight training activities higher, and sixth graders demonstrated preferences for activities that could be considered vestiges of elementary school PE (e.g., playground, tag, and target games). Although generalization is limited by the cross-sectional nature of the survey, it is reassuring to note that sixth graders' preferences do not radically change after their first year of exposure to the Kent curriculum. Slight yet nonsignificant variations in preference between grades suggests that sixth graders' continued interest in prepubertal activity forms should be considered. Additionally, sixth grade curriculum that focuses on enhancing technical expertise in discrete locomotor and manipulative skills used in activities that seventh graders prefer may prove an apt curricular transition between elementary and upper middle school PE. This may also serve to narrow skill gaps cited as reasons for disengaging from PE in urban schools (Bernstein et al., 2011; Ennis et al., 1999).

Gender

There were six activities that manifested or trended toward differences by gender with three among the overall top 10. The

direction of activity preferences by gender mostly paralleled those that Riemer and Visio (2003) reported: Concordant examples included football and hockey as male-typed/preferred and basketball, soccer, and racquet sports as gender-neutral/preferred sports (Table 2). Volleyball, which adolescents characterized as gender neutral (Riemer & Visio, 2003), was more preferred by girls in the present study. Additionally, jump rope and yoga were more preferred by girls than boys, which reinforced long-held views about the acceptability of male participation in these and similar physical activities (Haywood & Getchell, 2009; Sanderson, 2001). Foremost, these findings should not be used to segregate students by activity preference on the basis of gender, which may result in neglecting female students who want to learn "masculine" sports in urban settings (McCaughtry, 2004). Rather, Kent teachers should use this knowledge to dispel or blur activity gender stereotyping. Kent teachers are encouraged to emphasize a mastery orientation motivational climate, which middle school students tend to associate with gender fairness (Papaioannou, 1998). Furthermore, they are encouraged to uphold principles of gender-fair instruction, for which teachers (a) engage in inclusive teaching behavior, (b) hold high expectations for all students' ability and performance, (c) group based on ability instead of gender, (d) deemphasize winning, (e) provide ample practice opportunities in small groups, (f) promote team-building and cooperative activities, and (g) teach activities (in ways) that do not favor experienced/skilled students (Hutchinson, 1995; Staurowsky et al., 2007).

Ethnicity

There were seven activities overall that manifested or trended toward differences by ethnicity with one among the overall top 10. Comparing results to extant literature is difficult because it is sparse and focuses on high school or mixed-level school settings. Ethnic differences found for soccer (second overall) did not conform to those Tannehill and Zakrajsek (1993) found, but instead paralleled those found for ninth grade southern Californians, along with gymnastics (Hill & Cleven, 2005). According to the U.S. Census Bureau (2010), Mexicans comprise 86.6% of San Diego's Hispanic population. There is evidence that soccer plays a central role in identity formation and social interaction among Mexican boys (Figueroa, 2003; Wilson, 2010). Its ubiquity in the neighborhood can be seen in the two

Mexican soccer leagues that cater to the community's youth, as well as pickup games observed at the community's parks. That soccer is not preferred as highly by Asians and Blacks may reflect their feelings of otherness specific to soccer and teachers' unintentional yet stereotypical reinforcement of these feelings (Lund & Tannehill, 2010). It is important that Kent teachers and students reflect on soccer as the world's most popular game and refrain from imbuing it with specific cultural connotations. A similar phenomenon was observed for racquet sports, which although nonsignificant from a statistical standpoint, bears explanation. City Heights' high school badminton team had established itself as a dynasty, having won four consecutive county championships through 2008–2009. A vast majority of Asians—primarily Vietnamese—composed the team and were a source of pride for the Vietnamese community, which is concentrated in City Heights.

Remaining preference differences were for ethnonymic activities (e.g., Latin dance, Asian games). Inclusion of ethnonyms may have inadvertently caused students to select a preference that was less related to the activity itself and more to their personal identification with it. As this form of race-typing has been reported at the middle school level (Harrison, Lee, & Belcher, 1999), Kent teachers should proceed by inquiring more generally about student preferences for dance. Race-typing can be further stratified by gender, where males and females of a given race/ethnic group differ from each other, as well as their counterparts from other ethnic groups (Hannon, Soohoo, Reel, & Ratliffe, 2009). Kent teachers are encouraged not to oversimplify curriculum content by virtue of ethnicity. Instead, they must understand the intersection of ethnic and gender identities as they transact within the community and manifest in students to better guide content selection.

Strengths of the study include its (a) formulation as action research in which stakeholders defined the problem and participated in seeking solutions and (b) use of vector analysis as a means of categorical data distillation, which yielded directly comparable quantitative rankings that these teachers could directly compare.

Because the research problem/design and subsequent questionnaire belonged to the teachers first and foremost and not to the author, several limitations associated with questionnaire construction emerged. First, due to the large number of respondents, open-ended questions, which may have provided richer data upon which to reflect, could not be included. Second, listing several

activities ethnonymically may have biased respondents to respond (un)favorably based on the ethnonym and not on the activity. Future inventories should pose general physical activity names in one section and, if desired, follow with a section that includes ethnic activities and descriptions so that respondents can make more informed choices. Ostensibly, as this is an action research case of a single urban middle school, results may not be readily transferable.

Implications and Conclusion

These data can be used as a starting point for teachers and researchers in other urban middle school settings to (dis)confirm curricular reasons for low student engagement. Several implications can be drawn from the procedures and results of this study. First, curricular problems besetting urban PE can be solved by shared inquiry whereby teachers formulate the scope and causes of a problem and outside assistance is procured to measure its extent and provide results for reflection. Second, although PE practitioners may have a good feel for their students' activity preferences, systematic measurement of students' likes and dislikes can reveal their magnitude. Furthermore, trends can be elucidated by group membership such as grade, gender, and ethnicity that may be difficult to register through more informal means. Indeed, Kent physical educators were surprised by some of the group difference findings. Third, although Hispanics were the predominant ethnic group at Kent, curricular content decisions that focus exclusively on their predilections (e.g., soccer) may be less well received by non-Hispanics. This could have negative implications on student affect toward PE and may result in less physical activity engagement and more off-task behavior among disaffected student groups.

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