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Negative Experiences in Physical Education and Sport: How Much Do They Affect Physical Activity Participation Later in Life?

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Negative Experiences IN PHYSICAL EDUCATION AND SPORT

How Much Do They Affect Physical Activity Participation Later in Life?

Students who were picked last for a team often remain last when it comes to physical activity participation.

Bradley J. Cardinal Zi Yan Marita K. Cardinal

IFE IS THE ACCUMULATION OF EXPERIENCES, some good, some bad. Either way, people's experiences help to shape and form their attitudes and behaviors. Recalled experiences associated with positive feelings tend to be liked and attractive to people. Recalled experiences associated with negative feelings tend to be disliked and aversive to people. In other words, people attach feelings to their lived and recalled experiences and store them as memories.

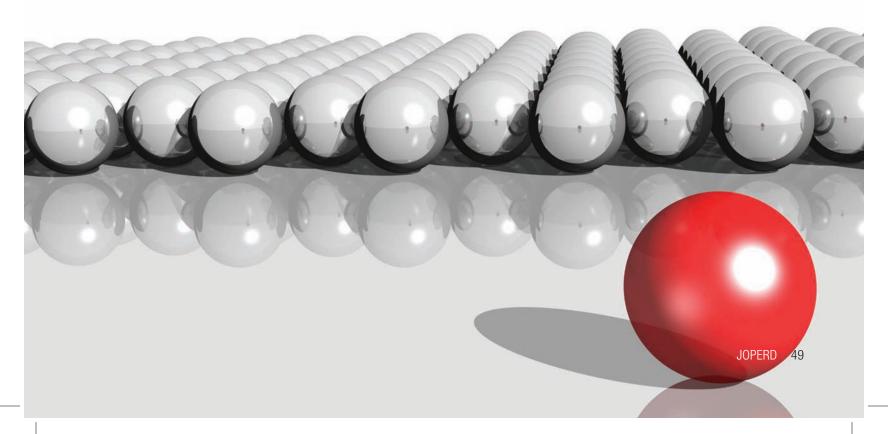
Physical education and sport settings are ripe with opportunities to form lasting memories, and there is good evidence that they do—especially when the memories are bad ones (Strean, 2009). To illustrate this point, some of Strean's study participants commented: (1) "...it [physical education] robbed me of the joy of physical activity for many years...It destroyed my physical confidence" (p. 217); (2) "To this day I feel totally inadequate...and have a natural reflex to AVOID THEM [physical activities] AT ALL COSTS...largely because of humiliating experiences in childhood" (p. 217); (3) "The exception to otherwise pleasant childhood play: those [expletive

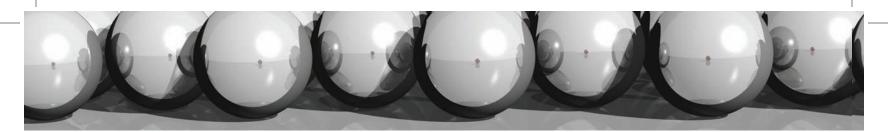
deleted] gym classes. Drill, verbal abuse, elitism, a sense of futility, and occasionally fear. Yuck" (p. 217); and (4)

I am a 51-year-old woman whose childhood experiences with sports, particularly as handled in school, were so negative that even as I write this, my hands are sweating and I feel on the verge of tears. I have never experienced the humiliation nor felt the antipathy toward any other aspect of life as I do toward sports. (p. 217)

Precisely how many people have had similar experiences or share similar memories is impossible to say. But if you ask 10 different people to recall something about their own physical education

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Data Analysis

The quantitative data were analyzed using STATA (12.0) software (StataCorp LP, College Station, TX). The dependent variable was exercise metabolic (MET) units, which were determined using the Godin and Shephard (1985) "Weekly Leisure-Time Exercise Questionnaire." Godin and Shephard reported a 2-week, test-retest reliability of .74 for the measure, and they were also able to accurately classify 69% and 66% of their "fit" and "unfit" study participants on the basis of their responses to this measure and their measured VO2 max and body fat percentage, respectively. Within our group of participants, the internal consistency of the measure was .71, indicating that it had good reliability. This measure has been described in detail in a previous *JOPERD* article (Welk & Wood, 2000).

Exercise MET units were first compared by gender using an independent t¬-test and then, because a gender difference was found, t(291) = 2.04, p < .05, d = .24, using a series of 2 (gender) by 2 (type of experience) analysis of variances (ANOVAs). The types of experiences being compared were (1) having tried out for a team and being cut; (2) being picked or chosen last for a team; and (3) being on a team, but not having the opportunity to play. The response options were yes or no. Of the possible interaction and main effects resulting from the ANOVAs, only having been picked or chosen last for a team was significant, F(1, 288) = 4.77, p < .05, d = .24. Effect size differences (d) were estimated using the procedures outlined by Thomas, Salazar, and Landers (1991). Means and standard deviations are reported in table 1.

For the qualitative analysis, we followed the constructivist paradigm. The emergence of major and minor themes stemmed from the students' own words, which were identified, reviewed, discussed, constantly compared, and verified by the authors.

experience, the odds are you will hear at least one horrific recollection. Furthermore, and much to the chagrin of the discipline, negative experiences have found their way into popular culture with regard to how "gym" classes, "PE" teachers, and youth sport coaches are commonly portrayed in film and television (Duncan, Nolan, & Wood, 2002; Patterson & Grammer, 2003), which further perpetuates and reinforces the situation.

Prevailing wisdom suggests that memories such as these might negatively affect physical activity participation later in life (Dagkas & Armour, 2011). Contrary to this viewpoint, Cotter and Lachman (2010) identified social strain (i.e., negative, even hostile criticism from one's spouse/partner, family, or friends) as having a positive effect on the physical activity behaviors of adults between the ages of 32 and 84. Of course, their study participants were adults, not children. Nor were their study participants recalling negative memories from their childhood physical education- or sport-related experiences. For instance, it is not beyond the realm of possibility that their study participants were using physical activity as an adaptive measure to cope with or escape from social strains being

experienced in other dimensions of life (Sachs & Buffone, 1984). However, the likelihood that children and youths could handle social strain in a similar manner is low, particularly when it occurs in an educational setting at the hands of a licensed educator.

In this article, we demonstrate an association between people's experiences with and memories of three specific negative physical activity experiences and their physical activity participation later in life. Our approach employed both quantitative and qualitative methodologies (see accompanying sidebar for further details).

What Did We Do?

Over the course of a year, undergraduate students enrolled in a university course were asked to voluntarily participate in an in-class activity focused on their current physical activity level and their first-hand experience earlier in life with one or more of three possible negative experiences in physical education or sport. The course was one of several available within the Social Processes and Social Institutions section of the university's general education curriculum. Students from more than 20 different majors on campus were enrolled in the course.

Of the 293 students who took part in this activity, there were more women (n = 168) than men (n = 125). The average age of participants was 20.7 (SD = 4.15) years old with no differences observed by gender. While the students were not asked about any personal ethnic or racial identifiers, 18% of the university's students are U.S. minorities and 7% are international.

The students first completed the Weekly Leisure-Time Exercise Questionnaire (Godin & Shephard, 1985), which allowed us to estimate their previous week's physical activity involvement (Welk & Wood, 2000). On the measure, the students reported their participation in a range of mild (e.g., easy walking), moderate (e.g., fast walking), and strenuous (e.g., running) forms of physical activity that lasted at least 15 minutes. From the information provided, exercise metabolic (MET) units were determined as follows: [(Mild \times 3) + (Moderate \times 5) + (Strenuous \times 9)]. Higher exercise MET units indicate higher physical-activity participation levels.

Each student was then asked to respond yes or no as to whether or not they had personally experienced any of the following three situations:

- Have you ever tried out for a team and been cut?
- Have you ever been picked or chosen last for a team?
- Have you ever been on a team, but not been given the opportunity to play (i.e., proverbial bench warmer)?

These three specific experiences were chosen because students enrolled in the course during previous terms had identified them as producing the most enduring memories. Also, these specific experiences relate to teaching and coaching behaviors or practices that have been identified in the literature as inappropriate, yet changeable (Strand & Bender, 2011).

Lastly, the students were asked to recall (from the previous list) one specific incident from their own history and to briefly describe that incident in writing. Even if they had never experienced such an incident themselves, they were encouraged to think about whether or not they had ever observed such an incident that happened to another person and to express their thoughts and views about



whatever they could recall. The students seemed to have no trouble remembering one or more incidents.

Data were collected throughout the year (i.e., during fall, winter, and spring terms) in an attempt to control for any potential seasonal variation that might occur with regard to physical activity participation. This activity also occurred during one of the initial class periods each term in an effort to minimize any potential confounding effect the class itself might have had on the participants.

What Did We Find Out?

The women reported significantly fewer weekly exercise MET units than did the men. This is consistent with other studies that show, in general, women are less active than men (Sisson, Camhi, Tudor-Locke, Johnson, & Katzmarzyk, 2012). Regardless of gender, neither "having been cut from a team" nor "having been on a team but not played much" was associated with the students' exercise behavior. However, those who said they had "been picked or chosen last for a team" reported fewer weekly exercise MET units compared to those who had not had that experience. Descriptive statistics are shown in table 1.

Table 1.
Descriptive Statistics for Exercise
MET Units by Gender and Type
of Negative Experience

Variable	Mean + Standard Deviation		
	Men (n = 125)	Women (n = 168)	Total (N = 293)
Exercise MET Units*	71.2 + 33.2	63.4 + 31.1	66.9 + 32.3
Have you eve	r tried out for a	a team and be	en cut?
No (82.1%)	70.3 + 31.1	64.6 + 29.9	67.2 + 30.1
Yes (17.9%)	74.8 + 42.9	58.2 + 36.7	67.0 + 39.7
Have you eve	r been picked	or chosen las	t for a team?
No (69.0%)	76.2 + 33.8	64.1 + 31.1	69.4 + 32.5
Yes (31.0%)	60.7 + 30.1	61.9 + 31.8	61.7 + 30.9
	r been on a te play (i.e., prov		
No (59.3%)	71.2 + 36.0	63.8 + 31.7	66.9 + 33.1
Yes (40.7%)	70.9 + 29.7	62.8 + 30.7	67.4 + 30.9

(p < .05).



The finding that stands out is that being picked or chosen last for a team earlier in life is associated with a reduction of 7.7 exercise MET units per week later in life. On the Godin and Shephard (1985) questionnaire, this approximates to participating in one less mild and one less moderate exercise session per week in comparison to those who had never been picked last for a team!

Overall, 17.9% of the students surveyed had tried out for a team and been cut, 31% reported being picked or chosen last for a team, and 40.7% recalled being on a team and not getting to play, with no gender differences detected. Regardless of gender, 37.1% indicated that they had never experienced any of these three potentially negative physical education- or sport-related experiences, whereas 38.3% reported experiencing one, 21.5% had experienced two, and 2.6% reported having experienced all three.

Three major themes, all negative, emerged from the students' written comments: "Enduring negative effect," "This isn't fair," and "I quit." Three minor themes also emerged; some of these were potentially positive, but others were not. They were "Redirection," "Resiliency," and "I want to play." Each of these themes will be integrated into the discussion that follows.

What Do We Think This Means?

Strand and Bender (2011) surveyed 308 physical education teachers in two midwestern states regarding their knowledge of appropriate and inappropriate instructional strategies based on the National Association for Sport and Physical Education (2009) guidelines. While



93.4% of their respondents correctly identified that having "captains" pick teams using a "pecking order" approach was inappropriate, only 71.4% of the teachers *never* did this. Of the remaining physical education teachers, 20.2% *sometimes* did this, 3.5% *often* did this, and 4.9% *always* did this. In other words, more than one in four of the physical education teachers surveyed were engaged in an instructional practice that they knew to be inappropriate! As Strean (2009) aptly observed,

We need to keep looking, both as individuals and at the structures of our learning environments, as we seek to raise the ethical standards of our profession and seek to reduce or eliminate the heartrending experiences some have had. (p. 217)

Failing to do so may have far-reaching implications, including diminished public support for physical education in the schools, which some might argue is already precarious (Himberg, 2000; Michigan Association for Health, Physical Education, Recreation and Dance, 1997).

Nearly one in three of our students reported having been picked last (i.e., 31%) within the context of their physical education experience earlier in life. The negative impact of this singular inappropriate teaching practice on the students' physical activity habits later in life was profound. Specifically, those students who had endured such an experience were significantly less active than were their peers.

The students in our class who had been picked last described the pain associated with the experience as being, among other things, alienating, emotionally harmful, frustrating, embarrassing, resulting in them having diminished self-confidence, feeling hurt, mistreated, not valued, upset, sad, ashamed, worthless, unwelcome, and socially isolated. This was captured well by a student who commented, "It made me feel bad being picked last. Normally my friends would do it to different people and think it was really funny to make fun of someone for getting picked last." Several students who had never experienced being picked last seemed fully aware of what was going on, as captured by another student's comment, "The person's pride is usually shaken and they are embarrassed or upset that they were not picked earlier. I don't like

approach. Moreover, it appeared to produce enduring negative feelings about physical activity, and it was associated with diminished levels of physical activity later in life. We see this practice as inhumane and educationally unjustifiable, not to mention a lengthy process that wastes precious class time that instead could be used for physical activity.

Given the host of positive physical and psychological benefits associated with physical activity participation (Kruk, 2009), physical educators should be using best practices aimed at inspiring and fostering lifelong physical activity participation, not discouraging it. A menu of field-tested, appropriate, and efficient ways to form groups or otherwise choose partners or teams have been described elsewhere (Pangrazi & Beighle, 2010; PE Central, n.d.).

The other two hypothesized negative physical education- and sports-related experiences (i.e., being cut from a team; and being on a team, but not playing) were not significantly related to the students' physical activity levels later in life. The reflections of the students we surveyed helped to shed light on this. For example, some were redirected into new activities, others seemed to develop some resiliency and use the experience as a source of motivation to work harder so it would not happen again, and still others ended up losing interest, dropping out, or decreasing their effort as a result of the experience. Based on the students' comments, the outcome appeared to have a lot to do with how the situation was handled by the physical education teacher or coach. For example, one student's comments clearly illustrate this point:

I tried out for basketball, but the coach went on to tell me he thought I would be more suited for wrestling. So I went on to wrestle. I won quite a few tournaments and went to state. So I guess it turned out to be a positive experience.

This is consistent with empirical studies that suggest some positive outcomes can result from such experiences, when handled using a humane perspective (i.e., with compassion, empathy, and understanding). Negative experiences treated in such a manner may even foster a sense of resiliency among young people, which might have some carryover benefits as they experience other adversities and disappointments in life (Hall, 2011). However, not everyone

felt that way:

Team selection strategies are clearly tricky and must be handled with the utmost sensitivity.

picking teams because of this." While definitely in the minority, a couple of students were less empathetic about this, saying, "Someone has to be...picked last...that is life."

Perhaps not surprising, the students who were picked first were the most physically gifted and/or popular in school. The least physically gifted and/or popular only had their lowly "position" in school highlighted and reinforced further through the pecking-order I was cut from my summer basketball team. That was 3 years ago, but to this day when I am reminded of that event I still get a pang of sadness and have to fight back tears. When I was cut, I cried for a week and could not bring myself to want to do anything. It felt like a break up.

Team selection strategies are clearly tricky and must be handled with the utmost sensitivity. For example, even students who were "lucky" enough to make the team were sometimes dissatisfied if they did not get playing time. This was commented upon by several students, but well expressed by the student who said, "I was a freshman and sat on the varsity bench. It wasn't fun cause I would have rather been on JV and played all the time."



Conclusion

Long recognized as an inappropriate teaching practice by the National Association for Sport and Physical Education (2009), the practice of choosing sides or teams using a pecking-order approach must be stopped. It has the exact opposite effect of what is ultimately desired in physical education. It causes real and long-lasting harm to people's psyches and their physical activity participation levels. It is a humiliating experience that only serves to marginalize and disadvantage those left standing on the line waiting and wondering when their name will be called, hoping they will not be called last. Moreover, in many instances the people left waiting on the line are the very people (e.g., less fit, less skilled) who might benefit the most from a properly conducted physical education course. Even most of the students who are not picked last see the injustice of this practice for others, thereby serving only to tarnish the reputation of physical education and physical education teachers everywhere. This practice is inexcusable, and it must be eliminated from the repertoire of physical educators once and for all!

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